LEAP LEDELSESADFÆRD OG PERFORMANCE
LEADERSHIP AND PERFORMANCE

Technical report

Survey of leaders and employees
Spring-summer 2014

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Introduction to the project (LBA/UTJ)

The Leadership and Performance (LEAP) research project is an experimental study on the effects of leadership training and leadership strategies on organizational performance. The project includes 672 Danish public and private leaders from five different sectors, day care, primary schools, secondary schools, tax divisions and bank branches. The LEAP project is conducted from 2014 to 2017 and is funded by the Danish Council for Independent Research. For more information on LEAP, please visit www.leap-project.dk.

This report summarizes and describes the baseline surveys of participating leaders and their employees. Two surveys were distributed to the leaders and one survey to their employees in the spring and summer of 2014. The report details the procedures, response rates and survey items for each of these surveys. A total number of 4,749 leaders were initially contacted and 1,850 leaders completed the first survey. These 1,850 leaders were invited to participate in the experiment and 735 expressed their interest. 672 leaders committed to participate in the experiment and 607 completed the second leader survey. 19,552 employees reporting to the 672 participating leaders were contacted just before treatment start and 8,861 completed the survey while 1,666 provided some answers.

The report also details the randomization procedure. A stratified random sampling method was used to assign the 672 leaders to treatment and control groups and to ensure an even representation of leaders from each sector across the groups. Within the treatment groups, leaders were assigned to classes according to geographic distribution. Four researchers with extensive teaching experience (Lotte Bøgh Andersen, Niels Westergaard-Nielsen, Anne Bøllingtoft and Christian Bøtcher Jacobsen) were randomly assigned to teach classes on all treatments. Each treatment comprises of four full days of teaching starting September 2014 and concluding June 2015.

Finally, the report describes the theoretical concepts and their operationalization for each of the three surveys. Some concepts were included in both leader and employee surveys (e.g., leadership strategies) while others were included only in the leader surveys (e.g., performance information use) or in the employee survey (e.g., public service motivation). Distributions, descriptive statistics and factor analyses are provided for the measures. The wording of all items (in English and in Danish) can also be found in the full questionnaires (appendices A-F).

Early Stage Process

The first part of the report will focus on what we have done in the initial stages of the project and why we did it.

Criteria for Invitation of Leaders

One of early steps of the project was determining who would be invited to participate in the leadership training. The overall criteria for each area are described in Table 1. A further criterion for received leadership training from us was that the leaders had not previously started a leadership education (e.g. FMOL[1]). Obviously we didn't know who had received leadership education before, and as a result we invited all leaders who were relevant given the criteria described below.

Table 1. Criteria for invitation across areas.

Area	Criteria for invitation
Secondary schools	All principals or heads of schools
Public primary schools	All principals or heads of schools
Private primary schools	All principals or heads of schools
Daycare, type 1	All type 1 leaders
Daycare, type 2	All type 2 leaders*
Daycare, type 3	All type 3 leaders**
Daycare, private	All type private leaders**
Tax	Selected by Tax
Banks	Selected by two banks

*: Only from daycare centers with 3-6 year-olds or 0-6 year olds, except if part of the formal authority of type 1 leader

**: Only from daycare centers with 3-6 year-olds or 0-6 year olds

With regard to secondary schools, we wanted the top leader at each school, who also had day-to-day leadership responsibility. In most cases this was the principal or head of school, but in some cases it was less straightforward. In some larger institutions with several schools the top leader was not the day-to-day leader for the employees at the different schools, and in these cases we invited the leader from each school with its own physical address. In other organizations, several different kinds of

[1] FMOL is one of the two Danish Master of Public Governance educations

secondary educations[2] shared the same physical address, with the 'head of school' serving an overarching, administrative function. Here we invited the top leader from each type of secondary education

In both public and primary schools this was rarely an issue, and almost all leaders from this area were principals or heads of school. In cases where different school units had one common leader, this leader was only chosen if he had personnel responsibility on each school, and did not just serve an administrative or financial function.

Management of public day care centers varies across municipalities. In some municipalities, an area manager has overall responsibility for all day care centers within a given area, while another leader has day-to-day leadership responsibility in each specific center. In other municipalities there are no area managers, and the day-to-day leader is the top leader. Because of this difference, we divided day care leaders into four groups: 1) Area managers, 2) day-to-day leaders in centers with area management, 3) day-to-day leaders in centers without area management, and 4) leaders in private institutions. This means, that leaders in group 2 have both employees and a leader of their own.

Both Tax and the banks were allowed to select which leaders they believed were relevant for the leadership training.

Gathering Information on the leaders

With regard to the primary and secondary education areas and the day care area, we wanted to invite each leader separately instead of inviting each organization as a whole.

In the secondary education area, the first step was to compile a list of all secondary education institutions from the website of the Danish Ministry for Education, and then visit the website of each institution in order to determine which leaders to invite given the criteria described above. Danish law requires all secondary school to provide contact information on personnel, which allowed us to identify all the relevant leaders. In Denmark, the secondary education area entails

[2] In Denmark there are several different kinds of secondary education, where the primary ones are 'technical' (HTX) 'business' (HHX) and 'regular' (STX)

both education for younger people, and adult educations centers[3], and leaders from these centers were included. All in all, we compiled a list of 300 leaders from secondary education

Contact information for primary schools was obtained following the exact same procedure as with the secondary education schools. In total 791 public and 278 private sector primary school leaders were identified.

In the day care center area, the first step was to identify all relevant institutions by visiting the website of each municipality. Once a total list had been made, the website of each specific institution was visited, in order to gather information on leaders, institution type and whether the center had area management. Unfortunately, it was not possible to obtain all the relevant information from the websites, and we had to contact several institutions by phone.

Tax and the two banks selected which leaders were relevant, and sent us their contact information. Specifically, we received a list of 153 relevant leaders from tax, and 45 from the two banks.

Inviting the Leaders

On March 25th 2014, 4749 leaders received an email with a cover letter explaining the terms for participating in the experiment. Potential participants were explicitly told that volunteering presented a 75 percent chance of receiving one year leadership training corresponding to an FMOL course. Specifically, the leaders would get credit for 5 ECTS points for participating if they (after the treatment period) hand in a paper, which is evaluated according to the normal FMOL criteria.

Another requirement for participation was completion of the survey, *Leader Pre-Treatment Survey 1*. Examples of key concepts measured in the survey are the transformational and transactional leadership strategies. In addition to the experimental variation in leadership strategy, it is very useful to have information on leader self-assessment and employee assessment of leadership strategies over time, and we therefore included these survey instruments in Leader Pre-Treatment Survey 1. Specific items can be seen in table 7, and in more detail in Appendix A and D. The

[3] In Danish: Voksenuddannelsescentre (VUC).

average completion time for Leader Pre-Treatment Survey 1 was about 15 minutes. Table 2 shows when each area received the invitation, when they received reminders, and when the survey closed.

Table 2. Dates of distribution and reminder mails for each area

Area	Distribution mail	First reminder	Second reminder	Third reminder	Closed
Secondary schools	March 25th	March 31st	April 7th	May 1st	May 28th
• Adult education centers	May 1st	May 2nd	May 9th	May 19th	June 3rd
Public primary schools	March 31st	April 7th	April 22nd	May 1st	June 3rd
Private primary schools	April 23rd	May 1st	May 9th	May 13th	June 3rd
Daycare, type 1	April 25th	May 5th			May 20th
Daycare, type 2	April 25th	May 5th			May 20th
Daycare, type 3	April 25th				May 20th
Daycare, private	April 25th	May 5th	May 13th		May 20th
Tax	May 19th	May 23rd	May 26th		June 2nd
Banks[4]					
• Jyske Bank	May 20th	June 2nd			June 9th
• Bank Nordik	May 28th	June 2nd			June 9th

Upon completion of Leader Pre-Treatment Survey 1, the leader received a link to a very short survey. If interested in participating in the project, the leaders were told to follow the link and simply click ‘yes, I would like to participate in the LEAP-project’, and then they would be contacted by us later. The total number of invited and participating leaders from each area is described in Table 3.

[4] Both banks received the same survey, but it was distributed on two different dates

Table 3. Number of invitations, replies and signups across sectors

Area	No. invited	No. replies (% of invited)	No. signup (% of replies)
Secondary schools	300	185 (61.6 %)	57 (30.8 %)
Public primary schools	784	348 (44.3 %)	164 (47.1 %)
Private primary schools	275	134 (48.7 %)	55 (41 %)
Daycare. type 1	369	194 (52.6 %)	93 (47.9 %)
Daycare. type 2	1.487	381 (25.6 %)	72 (18.9 %)
Daycare. type 3	937	262 (26.9 %)	94 (35.9 %)
Daycare. Private	363	154 (42.4%)	72 (46.8 %)
Tax	153	150 (98.0 %)	145 (96.7 %)
Banks	45	43 (95.6 %)	40 (93 %)
Total	**4.749**	**1.850 (40.0 %)**	**735 (39.7 %)**

*: Only from daycare centers with 3-6 year-olds or 0-6 year olds, except if part of the formal authority of type 1 leader

**: Only from daycare centers with 3-6 year-olds or 0-6 year olds

We did not experience significant problems with recruiting participants from schools, tax sections and day care (because there were a sufficient number of organizations or units to recruit from) but for secondary schools and bank branches we only managed to recruit 46 and 40 participants, respectively. For secondary schools, many leaders had already completed similar leadership training (often also on master level) and the bank headquarters turned out to be unexpectedly skeptical, often due to ongoing organizational restructuring. In return, when the banks gave us access to lists of relevant leaders, a very high percentage answered the survey and signed up for the project. The same was the case in Tax. It should also be noted, that the county of Horsens decided that the project should be mandatory for all their 15 day care leaders.

Table 2 shows that not all areas received the same number of reminders. Especially the day care area received fewer reminders than the others. This is because the leaders in this area demonstrated such interest in the project that further reminders could very well result in too many participants.

All participating leaders then received an email, requesting that they send the CPR-numbers of all employees for whom they have day-to-day leadership responsibility ("all employees in the organization, who refer to you."[5]). This turned out to be a problem for some of the participants. Recently there have been a series of scandals in Denmark revolving around the misuse of CPR-numbers, and because of this, some leaders were unable to obtain their employees' acceptance.

In order to maximize the number of participants, we made a different offer to the leaders who would otherwise back out because of the CPR-numbers. They were allowed to participate, but instead of using their employees CPR-numbers to gather background information, we would ask each employee for permission in the actual survey, and those who said no, would be asked to answer some extra background questions. This alleviated the problem greatly.

Between 26 % and 34 % of signups from the secondary and primary education areas backed out. A small number of these were because of the CPR- request, but the most common reason was simply a lack of time, while others had to back out for personal reasons such as illness. With regard to the primary education area, the higher back-out rate may be explained by a newly introduced reform of the primary educational system, which took up a lot of the relevant leaders' time. Although it was a smaller percentage, we also experienced some backing out in the day care area, which was also mainly caused by a lack of time.

After we received a list of contact information on their employees, each leader was randomly assigned to a treatment group or the control group.

The Randomization Process

We used a stratified random sampling method to assign leaders to treatment groups and control group. We used stratas to ensure an even representation of leaders from each type of

[5] Danish: "alle medarbejdere i organisationen, som referer til dig"

organization in treatment and control groups and we used random assignment within areas to avoid selection bias (Angrist & Pischke 2009). Thus, the merit of random assignment to treatment is that it ensures that participants are distributed on the different groups independently of potential outcomes implying that any treatment effect is exogenous (Morton & Williams 2010). More practically, leaders were first stratified by dividing them into the nine subtypes of leaders studied in the project (see Table 1). Within each subtype, leaders were given a random number from a list of forthcoming numbers (drawn from the website random.org) equal to the number of leaders in that subtype. The leaders were then in random order and we merged this list with a list containing one fourth 1-cifres, one fourth 2-cifres, one forth 3-cifres and finally one forth 4-cifres (1: transformational, 2: combination 3: transactional, and 4: control). There is a potential spillover effect from leaders receiving one type of training to leaders in the control group or to leaders in different treatment groups. This is, however, a conservative bias since results would be even stronger without spillover. Additionally, we have done our best to make every contact as similar as possible for the treatment groups, emphasizing for all treatments that they will be trained to employ tools that improve goal attainment in their organization. The leaders do not know that there are three different treatments or what the theoretical expectations are to their specific treatment.

Gathering information on employees

We were interested in including the employees for whom each leader had day-to-day leadership responsibility. As described above, we asked each leader to send us a list of contact information and CPR-numbers on each relevant employee, which turned out to be a problem for some leaders, and so we had to improvise an alternative.

Giving the leaders the possibility of opting out of sending CPR-information meant that more of the original sign-up stayed in the project, but in July 2014, close to two months after we first requested the employee lists, and after several reminder mails, some leaders had still not sent us their lists. This was especially a problem with the primary and secondary schools and the day care centers, and may have been caused by factors such as being busy because of exams, the summer holiday, or simple forgetfulness. We started making telephone contact with these leaders during July, and in most cases the leaders had simply not been able to find the time to make the lists, and promised to do so as soon as possible, while in other cases the leader had forgotten to notify us of his or her resignation from the project.

In a few cases the leader had not yet sent the list of employees by August, and in order to maximize the number of participants, we decided to compile the list for them. Obviously this was a last resort, as we could not always be sure specifically which employees referred to the given leader, when for example one physical address (and one website) was home to several different educational entities, or when some teachers taught at more than one physical location. To be precise, we compiled employee lists for 5 leaders in the secondary education area, and 5 in the primary school area.

Tax headquarters sent a complete list of employees, and we didn’t need to go through each individual leader. Bank Nordik headquarters did the same, but with Jyske Bank we emailed each individual leader and asked for a list of relevant employees. This also meant we encountered some of the same problems with leaders not sending us the lists, and we had to compile lists for 4 leaders in Jyske Bank.

In the end, we had contact information on 19,050 employees, who all received the Employee Pre-Treatment Survey.

Survey Setup, Collection Methods, Response Rate

In order to maximize the survey’s relevance to the respondents, Leader Pre-Treatment Survey 1 differed slightly from area to area. This was necessary, as each area had different users and organizational concepts, and in order to accommodate these differences, we created a slightly different version of the survey for each area, to ensure that the survey fit the given area. It should also be noted that some areas received unique questions, as described in table 7.

All surveys in the project were built in the online survey software, SurveyXact. The surveys’ designs were minimalistic and easy to understand in order to encourage respondents to complete the survey. Answers were saved continuously, in case the respondents left the survey or experienced technical difficulties. The fact that each answer was saved was emphasized in the introduction text along with instructions on how to navigate in the survey.

Before the actual employee and leader survey, we ran three pilot studies. The first pilot study was aimed at leaders. 10 leaders completed the first pilot. The second pilot study was aimed at employees and answered by 100 nurses, teachers and nursery teachers. The third pilot study we ran with 50 upper secondary schools teachers and their leader. The pilot surveys resulted in small adjustments of the surveys. Some wording of items was changed and the length of the survey in general was shortened with the sampling procedure of some items in the employee surveys (see also later about sampling).

We constructed each survey so questions on each page were related, in the sense that they measure the same latent concept. This gave the respondents a context to fit the questions into. The questions on each page of the surveys were randomized to minimize response set. We gave no option for the respondents to answer “I don’t know” to motivate the respondents to answer as many questions as possible. If the respondents did not want to answer, or could not answer the question, respondents could leave the question blank and continue with the survey. The flow of the survey ensured, that respondents did not get irrelevant questions on basis of answers of earlier questions.

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The primary distribution form was email. All surveys to the leaders were distributed by email. The invitation to participate in the surveys included a unique link to the survey. This way we could ensure, that respondents did not answer the surveys several times. Almost all of the employees had valid email addresses. Unfortunately, some employees didn’t have email. For employees without email, invitations to participate in the survey were sent in closed envelopes to their workplace. The invitation included a unique code for the respondents to enter on a webpage and open the survey. Following this procedure, we could ensure that the respondents did not answer the surveys several times or the leaders could interfere in the collection. 2316 invitations to participate in the survey were mail-delivered.

The response rate for employees who received the invitation via regular mail was fairly low (10.29%). The reason for the low response rate was that the letters were sent too late in the collection period. First, the letters had to be delivered to the workplace, and next the letters had to be distributed to employees at the workplace. We overestimated the speed whereby psychical letters are delivered, which gave the respondents very little time to answer the survey, resulting in the low response rate.

As to be expected, a considerable number of email addresses were not valid. Non-valid addresses resulted in 'bounce mails', where the email server replied with a "not delivered" message. We have excluded employees from the survey if we received several bounce messages from the respondent's purported email address. We also encountered some technical issues with the survey server, and on two separate days, lasting each time a couple of hours around midday, the survey was not available for the respondents. The technical issues did result in some frustrations among respondents (see "Managing the Survey").

Leader Pre-Treatment Survey 1

As described above, the leaders' pre-treatment survey 1 ran overall from 25th of March 2014 to the 19th of June 2014. Leader Pre-Treatment Survey 1 included the invitation to participate in the leadership training and other questions related to their leadership practice (see table 7 for overview of items). Dates of distribution, reminders, and closing can be seen in table 2. 1,850 leaders completed the survey as shown in table 3. Only the 774 leaders who initially accepted to be part of the project are included further analyses (for discussion of representativeness, see Andersen et al. 2014).

Leader Pre-Treatment Survey 2

Only participating leaders received Leader Pre-Treatment Survey 2. This survey focused less on specific leadership strategies, and more on the leaders' subjective experience. Examples of items are self-efficacy, organizational self-esteem, personality questions and questions about bullying in the workplace. Often these questions were of a more sensitive nature than the ones in Leader Pre-Treatment Survey 1, and one of the motivations behind this was that by asking already invested leaders these questions, they would not cause a larger drop-out rate. A full list of items can be seen in table 7, andin more detail in Appendix B.

Leader Pre-Treatment Survey 2 ran from August 20th until September 16th, 4pm, as this was the time the first group of participants ended their first session of leadership training. This way the survey was accessible for as long as possible, without any chance of the treatment (leadership training) affecting the answers. All in all 672 leaders received the survey, and 607 (90.33 %) completed it.

Table 4 shows the response rate for each area.

Table 4. Response rate for Leader Pre-Treatment Survey 2

Area	Completed	Delivered but not answered	Some answers	Total
Secondary schools	41 (100 %)	0 (0 %)	0 (0%)	41 (100%)
Public primary schools	107 (89.92%)	12 (10.08%)	0 (0%)	119 (100 %)
Private primary schools	32 (72.73%)	12 (27.27%)	0 (0%)	44 (100%)
Daycare, type 1	75 (89.29%)	9 (10.71%)	0 (0%)	84 (100%)
Daycare, type 2	43 (86.00%)	7 (14.00%)	0 (0%)	50 (100%)
Daycare, type 3	73 (87.95%)	8 (9.64%)	2 (2.41%)	83 (100%)
Daycare, private	52 (83.87%)	10 (16.13%)	0 (0%)	62 (100%)
Tax	142 (98.61%)	1 (0.69%)	1 (0.69%)	144 (100%)
Banks	42 (93.33%)	3 (6.67%)	0 (0%)	45 (100%)
Total	**607 (90.33%)**	**62 (9.23%)**	**3 (0.45%)**	**672 (100%)**

The Employee Pre-treatment Survey

The Employee Pre-Treatment Survey ran alongside the Leader Pre-Treatment Survey 2, and was accessible from August 26th till September 16th, 4pm, for the same reason as with Leader Pre-Treatment Survey 2. The Employee Pre-Treatment Survey was somewhat longer than the two leader pre-treatment surveys, and contained items from both. A full list of items can be seen in table 7 and in more detail in Appendix C. However, not all employees had to answer all parts of the survey.

Table 5. Response rate: Employee survey

Area	Completed	Delivered but not answered	Some answers	Total
Secondary schools	1,209 (53.07%)	843 (37.01%)	226 (9.92%)	2,278 (100%)
Public primary schools	2,343 (32.01%)	4,319 (59.00%)	658 (8.99%)	7,320 (100%)
Private primary schools	387 (45.32%)	397 (46.49%)	70 (8.20%)	854 (100%)
Daycare, type 1	1,480 (40.28%)	1,938 (52.75%)	256 (6.97%)	3,674 (100%)
Daycare, type 2	307 (47.67%)	274 (42.55%)	63 (9.78%)	644 (100%)
Daycare, type 3	659 (55.56%)	446 (37.61%)	63 (6.83%)	1,186 (100%)
Daycare, private	220 (53.40%)	156 (37.86%)	36 (8.74%)	412 (100%)
Tax	1,819 (70.10%)	538 (20.73%)	238 (9.17%)	2,595 (100%)
Banks	437 (74.19%)	114 (19.35%)	38 (6.45%)	589 (100%)
Total	**8,861 (45.32%)**	**9,025 (46.16%)**	**1,666 (8.52%)**	**19,552 (100%)**

The employee survey was delivered to 19,552 employees and 8,861 completed the survey. The total response rate for the survey to the employees was 45.32 %. The response rate was lowest for public primary schools (32.01%) and highest for banks (74.19%).

Two reminders were sent on the 3rd September and 11th September. On the 15th September a last – and more thankfully worded reminder – was sent to the employees. We have included a small number of employee answers from after 4pm on the 16th of September (n = 24) and therefore after treatment to leaders had begun. The justification for this is that the extra-included respondents' leaders' treatment had either not begun, or the leaders were in the control group. In other words, there was no conceivable way that the extra respondents' answers could have been influenced by the treatment at this stage.

Figure 1 shows the frequency of answers distributed over the entire period.

Figure 1. Frequency for completion of Employee Pre-Treatment Survey 1 by date

As seen by figure 1, the reminders to the employees had effect on the amount of response with peaks around dates, where reminders were sent.

To avoid overloading the respondents, we have taken advantage of the large sample size and grouped respondents into five group. All groups received the core questions (ranging between 99 and 113 items across areas) and a set of specific questions (between 5 and 36 questions) belonging to each of the five groups. The organizations vary substantially in size, so we have chosen to have a minimum of four respondents in each group. The groups are therefore prioritized, so that we can introduce more groups of questions in larger organizations. Thus, in the smallest organizations (less than 8 employees) all respondents receive questions about organizational culture. Groups of questions are then introduced in organizations depending on their size. Preferred leader style questions are preferred asked in organizations larger than 20 employees. Respondents have been randomly selected to the groups within their organization. Table 6 sums up the numbers of employees how received different questions depending on the size of their respective organization.

Table 6. Sampling of respondents to groups of survey questions

Sample	(1) MLQ	(2) Bullying, affectivity	(3) Work perspective	(4) Preferred leader style	(5) Organizational culture and communication
Size of organization					
Less than 8 employees	0	9	23	5	317
8-12 employees	0	123	333	5	361
13-16 employees	56	348	361	23	357
16-20 employees	131	401	413	215	383
More than 20 employees	2,482	3,372	3,331	3,139	3,290
N	**2,669**	**4,253**	**4,461**	**3,387**	**4,708**
Coverage of full sample[6]	13.65	21.75	22.82	17.32	24,08
Completed	934	2,038	2,115	1,443	2,314
Response rate	34.99%	47.92%	47.41%	42.60%	49.15%

[6] Due to sampling error, some respondents did not get any of the sampled items (n=74, 0.38%)

Survey Maintenance

Respondents in the pre-treatment survey sent fairly few inquiries, and they were handled continuously during the spring. The student helpers and researchers frequently communicated with the participating leaders during spring and summer, and perhaps because of this we received hardly any inquiries or questions regarding Leader Pre-Treatment Survey 2. The same cannot be said for the Employee Pre-treatment Survey, and the next part describes which kind of inquiries and questions we received, and how we dealt with them.

In the first distribution mail and the two following reminder mails, a unique email address for each of the five areas was assigned, which the respondents and participants could contact if they had any doubts or questions regarding the survey. The email addresses were used extensively during the entire period, and the student helpers tried as far as possible to answer every email within 2-3 days. The typical questions regarded respondent anonymity or the content of the survey, and many respondents complained when they received a reminder, that they had already answered the survey – even though some had only answered parts of the survey.

A few employees were unsure which exact leader the survey regarded, while others felt that the survey had not been properly adapted to, or was simply not relevant for their organization or work situation. Others argued that the questions were too personal, and too focused on the employee as a person.

Besides these, there were some who notified us that they were unable to participate in the survey because of illness, leave, change of employment, or because they simple were unwilling to participate. These respondents were continually removed from the project.

Besides these, *Tax* had two unique types of inquiries, caused by errors during the distribution of surveys. First off, the initial distribution mail had assigned the wrong contact mail, which created some confusion for tax employees, who because of this thought that their replies had not been registered. Secondly, some employees received a reminder mail, where the subject of the email referred to school leadership, and not tax leadership, which obviously created some confusion. Both types of inquiries were responded to quickly, and all misunderstandings were solved.

The day care areas received especially many inquiries from day care leaders and employees under area management. This was because many of the employees simply didn't know the area manager, or had only met the person a few times, which made it difficult to answer the surveys. Inquiries of this nature were answered quickly with the request, that the respondent answered as well as he or she could, given their (lack of) familiarity with the area manager. The rest of the inquiries in this areas conformed to the pattern described earlier.

Regarding *the primary education area*, a lot of employees argued that they were unable to answer evaluate their leader, as they had come under new leadership with the start of the Danish school year (August 1st). Besides these, a lot of inquiries regarded the length of the survey, and that it was too time consuming to answer all of the questions, compared to the advertised time use. This may have been caused by the public primary schools being given an extra ‘question bloc’. There were also a lot of inquiries from teachers, who said they simply did not have the time to answer the survey (no time for preparation after the educational reform, answering surveys is not part of the job description, etc.), which was probably caused by the new work hour reform. Finally, nearing the end of the deadline, there were a lot of inquiries from employees, who received the invitation to participate by letter, as their leader had not provided email addresses. In the letter there had not been supplied a deadline, and because of this, the employees didn’t realize that the survey had ended, which made them wonder why they couldn’t access the survey, and why they had not been notified of the deadline.

The secondary education area also had some unique characteristics. The area is generally subjected to a lot of studies and surveys, and a lot of employees complained about the general amount of surveys, and said they didn’t have time to spend another 20 minutes on this study. Usually, however, these complaints could be resolved by further explaining how their responses would be a part of their leader’s educational course. Besides these, there were a lot of inquiries as to why we asked a series of questions regarding the specific employee, as many of the respondents failed to see the relevance of these, given that the general purpose of the survey was to evaluate the leader. However, after having been explained that these background and opinion questions were necessary to give an as precise picture of the leader and their context, almost all of the respondents understood why they we asked them. Finally, it should be noted, that because of an error that occurred when we imported some of the respondents to the survey software, some institutions received the initial survey invitation later than others. In some cases, this led to employees receiving a reminder mail no more than two days after receiving the distribution mail, which we received some complaints about. Once we explained it was caused by a technical error and apologized for the inconvenience the respondents showed understanding however.

Employees in *the banking sector* made very few inquiries in connection with the survey. Usually the inquiries had a technical nature, and were usually doubts as to whether their answers had been registered or not, or if it was possible to receive the survey in another language.

Overview of measured Concepts and Items

Table 7 shows which concepts and items were included in which survey, and which areas and samples received which. The table shows the concept itself, and how many specific items are used to measure each concept. As far as possible, the items are presented in the same order as they appear in the surveys. The concepts are clickable links in table 7 if you are reading the report PDF-file, and if you click the concept, you will be transferred to the part of the report where the factor loadings and/or distributions of the items are described.

Some items are included in both leader surveys and the employee survey, some only in the leader survey and finally, some are only included in the employee survey. "Leadership strategy" exemplifies the motivation behind asking both employees and leaders questions on the same issue: There is differences between *perceived* leadership reported by the employees and *intended* leadership reported by the leaders. On the contrary, some questions are only relevant for the leaders, while other questions are relevant only for the employees.

Finally, some of the leadership-strategy items are included for a small sample of daycare middle managers. In many organizations, a hierarchy of leaders is in place. A leader may be responsible for and manage the activities of a single organization but report to a higher rank leader overseeing different units within the same hierarchy of organizations. As mentioned before, in many Danish day care centers, there is an area manager in the municipality, and a day-to-day leader in each day care center. Consequently, the second group of leaders was asked to assess *both* the leadership behaviours of their higher rank leader (the area manager) as well as their own leadership behaviors.

Table 7. Full list of items by survey and area.

DIMENSION	#	SURVEY			AREA[7]				
		LEADER PRE-TREATMENT SURVEY 1	LEADER PRE-TREATMENT SURVEY 2	EMPLOYEE PRE-TREATMENT SURVEY	D	P	S	T	B
LEADERSHIP									
Performance expectations	4	X		X	X[8]	X	X	X	X
Transformational leadership	7	X		X	X[8]	X	X	X	X
Transactional leadership									
- Contingent pecuniary rewards	4	X		X	X[8]	X	X	X	X
- Contingent non-pecuniary rewards	4	X		X	X[8]	X	X	X	X
- Contingent sanctions	4	X		X	X[8]	X	X	X	X
Leadership intention	2	X		X	X[8]	X	X	X	X
Contingent tools to reward employees' good results	10	X		X	X	X	X	X	X
Stakeholder influence	3	X			X	X	X	X	X
Cross-pressure									
- The logical identity-dilemma	1	X		X	X	X	X	X	X
- The ethical identity-dilemma	1	X		X	X	X	X	X	X
- The moral identity-dilemma	1	X		X	X[9]	X[9]	X	X	X
- Chain-of-command cross-pressure – experienced	1	X			X	X	X	X	X
- Chain-of-command cross-	1	X			X	X	X	X	X

[7] D = Daycare centers, P = Primary schools, S = Secondary schools, T = Tax, B = Banks
[8] Middle managers in the day care area received the employee survey, and were both asked about their leader's leadership style, and their own leadership style.
[9] Private day care centers and primary schools did not receive this question

pressure – focus									
Advancement ambitions	1	X			X	X	X	X	X
Performance based pay									
- Percentage	1	X			X	X	X	X	X
- Criteria	10	X			X	X	X	X	X
Formal performance management systems	4	X			X	X	X	X	X
Performance information use	3	X			X	X	X	X	X
Managerial tasks	11	X[10]	X		X	X	X	X	X
MLQ	28			X[11]	X	X	X	X	X
Leadership domain identification	4		X		X	X	X	X	X
Strategy focus	8		X		X	X	X	X	X
Organizational self-esteem	10		X		X	X	X	X	X
Self-efficacy	4		X		X	X	X	X	X
MOTIVATION, VALUES AND GOALS									
Public service motivation									
- Self-sacrifice	6			X	X	X	X	X	X
- Compassion	5			X	X	X	X	X	X
- Commitment to the public interest	5			X	X	X	X	X	X
- Attraction to public policy	3			X	X	X	X	X	X
User orientation	3			X	X[12]	X	X	X	X
Intrinsic motivation	4			X	X	X	X	X	X
Basic needs satisfaction									
- Fulfillment of the need for autonomy	3			X	X	X	X	X	X
- Fulfillment of the need for	3			X	X	X	X	X	X

[10] Only leaders from the day care area received the question in Leader Pre-Treatment Survey 1

[11] Only sample 1

[12] The day care area received 4 items instead of 3

competence									
- Fulfillment of the need for relatedness to co-workers	3			X	X	X	X	X	X
- Fulfillment of the need for relatedness to specific target-group	3			X	X	X	X		
Person-environment fit									
- Person-organization fit	4			X	X	X	X	X	X
- Person-job fit	4			X	X	X	X	X	X
Perceived societal impact	2			X	X	X	X	X	X
Vision valence	3			X	X	X	X	X	X
Value conflict	5	X		X	X				
Goal prioritization	7	X[13]	X[14]	X		X	X		
Performance information experiment	7			X		X			
Acceptance of leadership	4			X		X			
Perceived organizational challenges	5		X			X			
Perceived performance	3		X			X			
School teachers' work rules	4			X		X			
Job satisfaction	1	X		X	X	X	X	X	X
PERSONALITY AND WELL-BEING									
Autonomy	4	X			X	X	X	X	X

[13] Only leaders in the primary education area received this question
[14] Only leaders in the secundary education area received this question

Affectivity	8		X	X[15]	X	X	X	X	X
Bullying in the workplace	9		X	X[15]	X	X	X	X	X
Subjective measures of bullying	3		X	X[15]	X	X	X	X	X
Who bullied?	1		X	X[15]	X	X	X	X	X
Previous exposure to bullying	1		X	X[15]	X	X	X	X	X
Work load	3		X	X[16]	X	X	X	X	X
Social support	3		X	X[16]	X	X	X	X	X
Work engagement	9		X	X[16]	X	X	X	X	X
Cynicism	4			X[16]	X	X	X	X	X
Organizational culture	5			X[17]	X	X	X	X	X
Internal communication performance	5			X[17]	X	X	X	X	X
Sickness absence	1			X	X	X	X	X	X
Presenteeism	1			X	X	X	X	X	X
Subjective performance	11		X	X	X	X	X	X	X
Preferences for Leader Style	8			X[18]	X	X	X	X	X
New employee performance review system	1			X	X	X	X	X	X
New test system	6			X	X	X	X	X	X
CPR-Request	1			X	X	X	X	X	X
BACKGROUND QUESTIONS									
Birth year	1			X	X	X	X	X	X
Gender	1			X	X	X	X	X	X
Amount of areas taught	1			X			X		

[15] Only sample 2
[16] Only sample 3
[17] Only sample 5
[18] Only sample 4

Area of education	1			X			X			
Teaching qualifications	1			X		X				
Level of education	1			X			X	X	X	
Childcare worker qualifications	1			X	X					
Year of completed education	1			X	X	X	X	X	X	
Employment status and hours	2			X	X	X	X	X	X	
Stay-at-home children	3			X	X	X	X	X	X	
Marital status	1			X	X	X	X	X	X	
Sideline jobs	1			X	X	X	X	X	X	
Sideline job description	1			X	X	X	X			
Type of day care center, overall	1	X			X					
Type of day care center, sector	1	X			X					
Type of private sector day care	1	X			X					
Experience, workplace	1	X		X	X	X	X	X	X	
Experience, position	1	X		X	X	X	X	X	X	
Experience, leadership	1	X			X	X	X	X	X	
Leadership education	1	X			X	X	X	X	X	
Leadership education, which	1	X			X	X	X	X	X	
Master education, which	1	X			X	X	X	X	X	
Comments	1	X	X	X	X	X	X	X	X	
Total items		**100**	**129**	**247**						

Theoretical Definitions, Factor Loadings, and Distributions

This chapter introduces the theoretical definition of each measured concept, how each item loads in a factor analysis, and the distribution of respondents.

We conduct semi-explorative factor analysis to measure the degree to which the items are tapping into the same underlying concept. Principal-factor method (principal axis) is used to analyze the correlation and the communality of the items and the latent factor (Rencher & Christensen 2012). The distributions of the concepts are constructed as additive indexes for all concepts to illustrate and provide information of the variance, numbers of valid answers and mean values. If the respondents have missing values on one item in each concept, the missing are replaced with mean value for all respondents answer on the particular item. This ensures that we don't lose too many respondents in the construction of the indexes. The general rationale behind index constructions is that we increase the validity and reliability of the measurements, increases the level of measurement and simplify data. The concepts are presented in the same order as in table 7

Performance Expectations (UTJ)

Performance expectations concern the level of ambition that leaders set for their employees. Studies suggest that setting ambitious goals can be instrumental to foster employee work motivation and to raise performance. Expressing high performance expectations require the leader to set ambitious goals and show employees what he/she expects from them. In terms of measurement, the project draws on survey items that have been validated by House (1998). The items were distributed to leaders, employees and middle managers in the daycare area.

Table 6b. Items measuring performance expectations

	Leaders: As a leader I …	
l_hpe1	Insist on only the best performance *Forlanger jeg altid medarbejdernes bedste præstationer*	House 1998
l_hpe2	Do not expect much from employees in terms of performance *Forventer jeg ikke meget af medarbejdernes præstationer*	House 1998
l_hpe3	Will not settle for second best *Vil jeg ikke stille mig tilfreds med andet end medarbejdernes bedste præstationer*	House 1998
l_hpe4	Show that I expect a lot from the employees *Viser jeg, at jeg har høje forventninger til medarbejderne*	House 1998
	Employees: My leader …	
hpe1	Insists on only the best performance *Forlanger altid medarbejdernes bedste præstationer*	House 1998
hpe2	Does not expect much from employees in terms of performance *Forventer ikke meget af medarbejdernes præstationer*	House 1998
hpe3	Will not settle for second best *Vil ikke stille sig tilfreds med andet end medarbejdernes bedste præstationer*	House 1998
hpe4	Shows that he/she expect a lot from the employees *Viser, at vedkommende har høje forventninger til medarbejderne*	House 1998

Table 7b. Factor analysis: Performance expectations as reported by leaders.

Pretext: As a leader I …	Loadings
Insist on only the best performance	.661
Do not expect much from employees in terms of performance (reversed)	-.230
Will not settle for second best	.567
Show that I expect a lot from the employees	.516

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. Reversed: Code is reversed. N = 786. Cronbach's alpha = .591.

Table 8. Factor analysis: Performance expectations as reported by employees.

Pretext: My leader …	Loadings
Insists on only the best performance	.756
Does not expect much from employees in terms of performance (reversed)	-.489
Will not settle for second best	.679
Shows that he/she expect a lot from the employees	.687

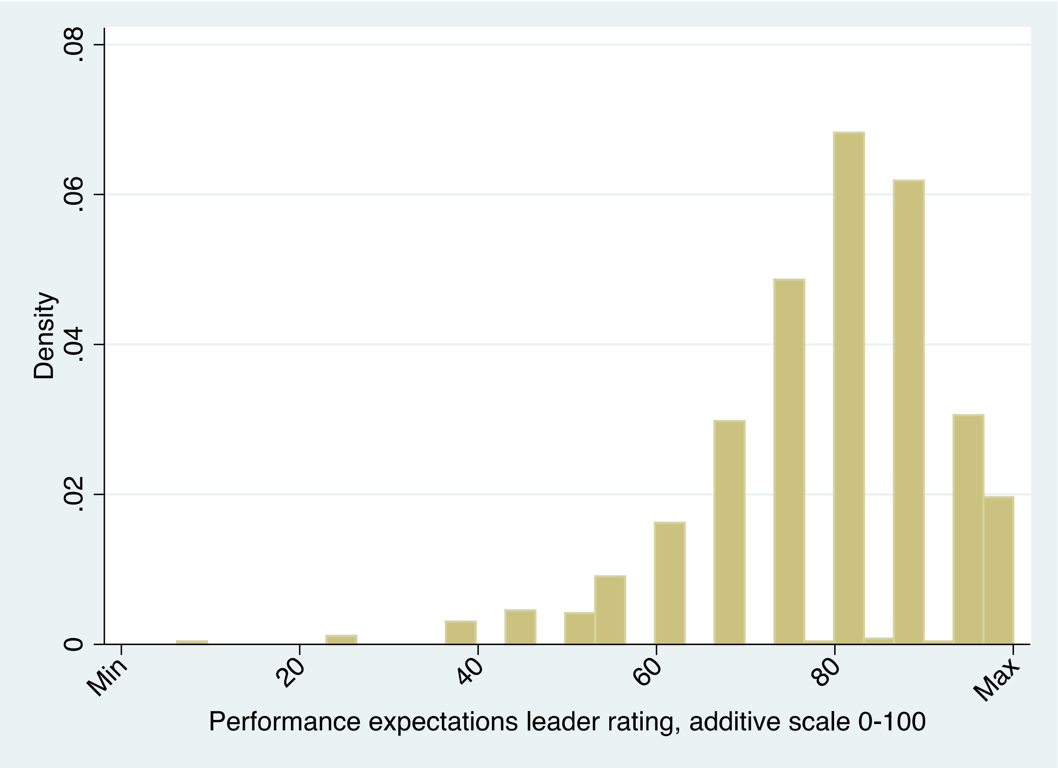
Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N = 10063. Cronbach's alpha = .763.

Table 9. Factor analysis: Performance expectations as reported by middle managers (daycare).

Pretext: As a leader I …	Loadings
Insist on only the best performance	.703
Do not expect much from employees in terms of performance (reversed)	-.219
Will not settle for second best	.568
Show that I expect a lot from the employees	.632

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N = 284. Reversed: Code is reversed. Cronbach's alpha = .594

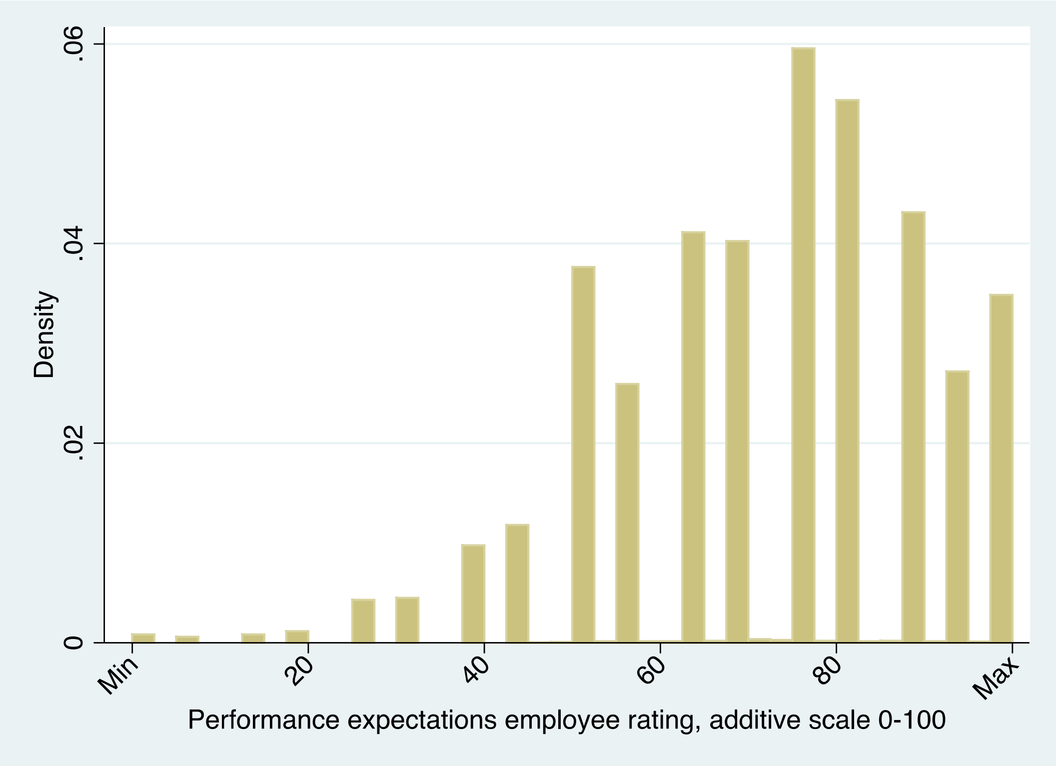
Figure 2. Distribution of performance expectations as reported by leaders.



Note: N = 792, Mean = 79.29, std. dev. = 13.30 min = 6.25, max =100

The distribution is highly left-skewed indicating that leaders in general perceive themselves to set and express high performance expectations in their organizations (mean = 79.29). The alpha reliability score is not satisfactorily (.59). It can be improved to .65 by dropping the reverse coded item (very low loading in the factor analysis of -.230).

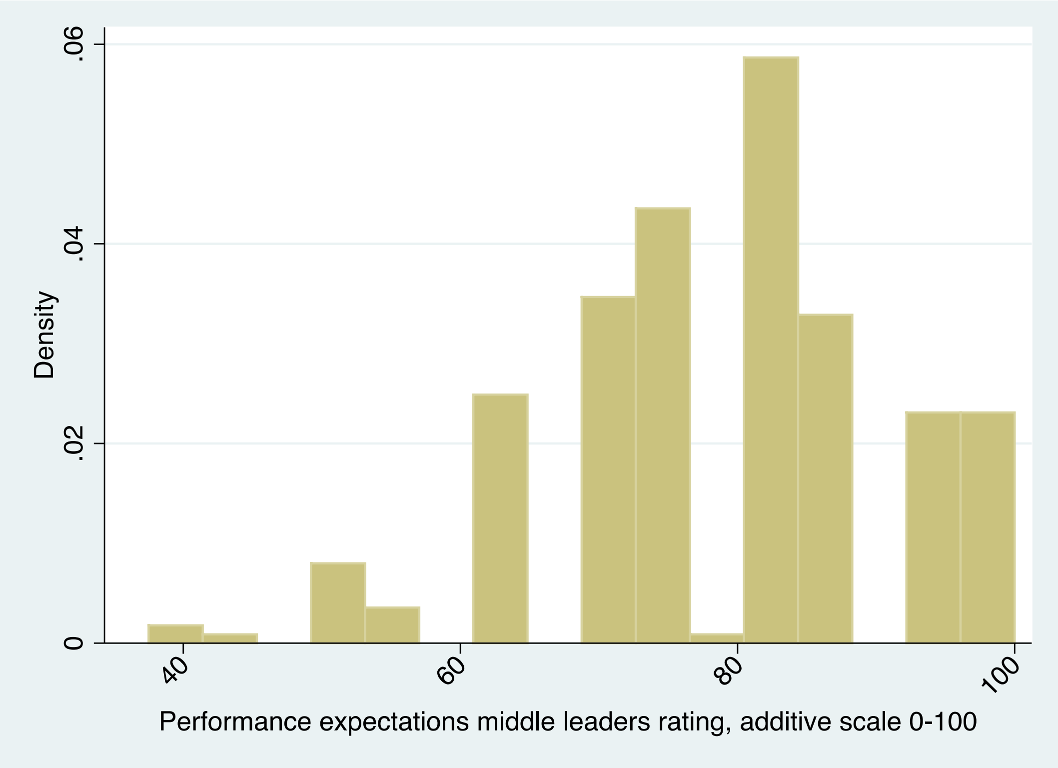
Figure 3. Distribution of performance expectations as reported by employees.



Note: N = 10132. Mean = 71,75, std. dev = 18,43 min = 0, max =100

The distribution is left-skewed. The distribution suggests that employees generally perceive their leaders to set and express high expectations for their performance (mean = 71.74).

Figure 4. Distribution of performance expectations as reported by middle managers (daycare).



Note: n = 288, Mean = 78.54, std. dev. = 12.77 min = 37.5, max =100

The distribution is highly left-skewed indicating that the middle managers in general perceive themselves to set and express high performance expectations in their organizations (mean = 78.54).

Transformational Leadership (UTJ)

Transformational leadership has been consistently linked with employee and organizational performance in private and public sector studies (e.g., Judge and Piccolo 2004; Trottier et al. 2008). In this project, transformational leadership comprises behaviors seeking to 1) develop a clear vision of the core organizational goals, 2) share it with employees and 3) sustain employees' attention to the vision in short and long run. Transformational leaders enact these behaviors with the intention to activate the higher-order needs of employees and motivate employees to go beyond self-interest for the sake of the organization (Wright et al. 2012). Consequently, we define transformational leadership as *behaviors seeking to develop, share and sustain a vision intended to encourage that employees transcend their own self-interest and achieve organization goals.*

Survey measures of transformational leadership behaviors are inspired by previous studies (Podsakoff et al. 1996; Moynihan et al. 2012) and supplemented by items created for this project. One item is generated to capture the intention/perceived intention of the leader. The survey measures are distributed to both leaders and employees.

Table 10. Items measuring transformational leadership

	Leaders: As a leader I …	
l_tfl1	Concretize a clear vision for the [ORGANIZATION TYPES] future *Konkretiserer jeg en klar vision for [ORGANISATIONENS] fremtid*	Modified from Moynihan et al. 2012
l_tfl2	Communicate my vision of the [ORGANIZATION TYPES] future *Kommunikerer jeg [ORGANISATIONENS] vision for fremtiden*	Modified from Podsakoff et al.1996
l_tfl3	Have a clear sense of where I believe our [ORGANIZATION TYPE] should be in 5 years	Modified from Moynihan et al. 2012

	Har jeg en klar forståelse for, hvor jeg mener vores [ORGANISATION] skal være om 5 år	
l_tfl4	Make a continuous effort to generate enthusiasm for the [ORGANIZATION TYPES] vision *Gør jeg en løbende indsats for at skabe entusiasme for [ORGANISATIONENS] vision*	Modified from Podsakoff et al. 1996
l_tfl5	Seek to make employees accept common goals for the [ORGANIZATION TYPE] *Forsøger jeg at få medarbejderne til at acceptere fælles mål for [ORGANISATIONEN]*	Modified from MacKenzie et al. 2001
l_tfl6	Strive to get the [ORGANIZATION TYPE] to work together in the direction of the vision *Gør jeg en løbende indsats for at få [ORGANISATIONENS] medarbejdere til at arbejde sammen i retning af visionen*	Modified from Podsakoff et al. 1996
l_tfl7	Strive to clarify for the employees how they can contribute to achieve the [ORGANIZATION TYPES] goals *Bestræber jeg mig på at gøre det klart for medarbejderne, hvordan de kan bidrage til at opnå [ORGANISATIONENS] mål*	Own
	Employees: My leader …	
tfl1	Concretizes a clear vision for the [ORGANIZATION TYPES] future *Konkretiserer en klar vision for [ORGANISATIONENS] fremtid*	Modified from Moynihan et al. 2012
tfl2	Communicates his/her vision of the [ORGANIZATION TYPES] future	Modified from Podsakoff et al. 1996

	Kommunikerer [ORGANISATIONENS] vision for fremtiden	
tfl3	Has a clear sense of where our [ORGANIZATION TYPE] should be in 5 years *Har en klar forståelse for, hvor vores [ORGANISATION] skal være om 5 år*	Modified from Moynihan et al. 2012
tfl4	Makes a continuous effort to generate enthusiasm for the [ORGANIZATION TYPES] vision *Gør en løbende indsats for at skabe entusiasme for [ORGANISATIONENS] vision*	Modified from Podsakoff et al. 1996
tfl5	Seeks to make employees accept common goals for the [ORGANIZATION TYPE] *Forsøger at få medarbejderne til at acceptere fælles mål for [ORGANISATIONEN]*	Modified from MacKenzie et al. 2001
tfl6	Strives to get the [ORGANIZATION TYPE] to work together in the direction of the vision *Gør en løbende indsats for at få [ORGANISATIONENS] medarbejdere til at arbejde sammen i retning af visionen*	Modified from Podsakoff et al. 1996
tfl7	Strives to clarify for the employees how they can contribute to achieve the [ORGANIZATION TYPES] goals *Bestræber sig på at gøre det klart for medarbejderne, hvordan de kan bidrage til at opnå [ORGANISATIONENS] mål*	Own

Table 11. Factor analysis: Transformational leadership reported by leaders

Pretext: As a leader I …	Loadings
Concretize a clear vision for the [ORGANIZATION TYPES] future	.725
Communicate my vision of the [ORGANIZATION TYPES] future	.764
Have a clear sense of where I believe our [ORGANIZATION TYPE] should be in 5 years	.492
Make a continuous effort to generate enthusiasm for the [ORGANIZATION TYPES] vision	.705
Seek to make employees accept common goals for the [ORGANIZATION TYPE]	.588
Strive to get the [ORGANIZATION TYPE] to work together in the direction of the vision	.712
Strive to clarify for the employees how they can contribute to achieve the [ORGANIZATION TYPES] goals	.614

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N = 790. Cronbach's alpha = .835.

Table 12. Factor analysis: Transformational leadership reported by employees

Pretext: My leader …	Loadings
Concretizes a clear vision for the [ORGANIZATION TYPES] future	.851
Communicates his/her vision of the [ORGANIZATION TYPES] future	.840
Has a clear sense of where our [ORGANIZATION TYPE] should be in 5 years	.733
Makes a continuous effort to generate enthusiasm for the [ORGANIZATION TYPES] vision	.827
Seeks to make employees accept common goals for the [ORGANIZATION TYPE]	.759
Strives to get the [ORGANIZATION TYPE] to work together in the direction of the vision	.850
Strives to clarify for the employees how they can contribute to achieve the [ORGANIZATION TYPES] goals	.826

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N = 9713. Cronbach's alpha = .932.

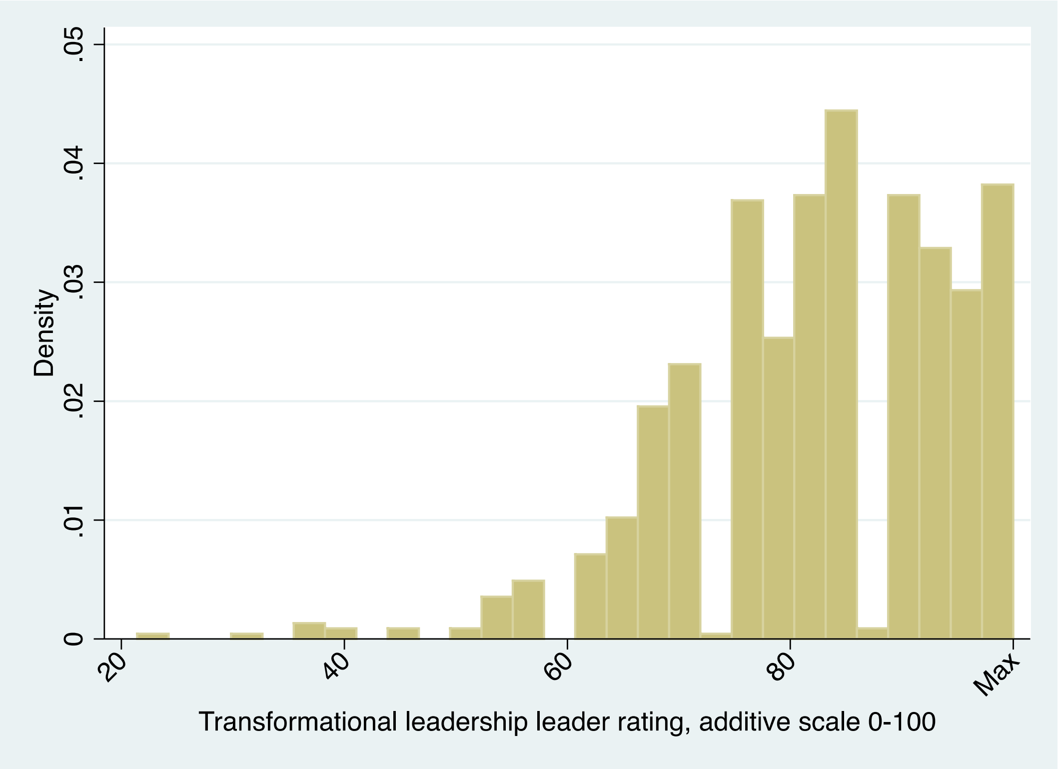
Table 13. Factor analysis: Transformational leadership reported by middle managers

Pretext: As a leader I …	Loadings
Concretize a clear vision for the [ORGANIZATION TYPES] future	.746
Communicate my vision of the [ORGANIZATION TYPES] future	.700
Have a clear sense of where I believe our [ORGANIZATION TYPE] should be in 5 years	.585
Make a continuous effort to generate enthusiasm for the [ORGANIZATION TYPES] vision	.788
Seek to make employees accept common goals for the [ORGANIZATION TYPE]	.704
Strive to get the [ORGANIZATION TYPE] to work together in the direction of the vision	.788
Strive to clarify for the employees how they can contribute to achieve the [ORGANIZATION TYPES] goals	.740

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N = 277. Cronbach's alpha = .881.

The factor loadings across leaders, employees and middle managers are all satisfactory and all items are used to construct indexes.

Figure 5. Distribution of transformational leadership as reported by leaders



Note: N = 802. Mean = 82.79 , std. dev = 12.42 min = 21.43, max =100

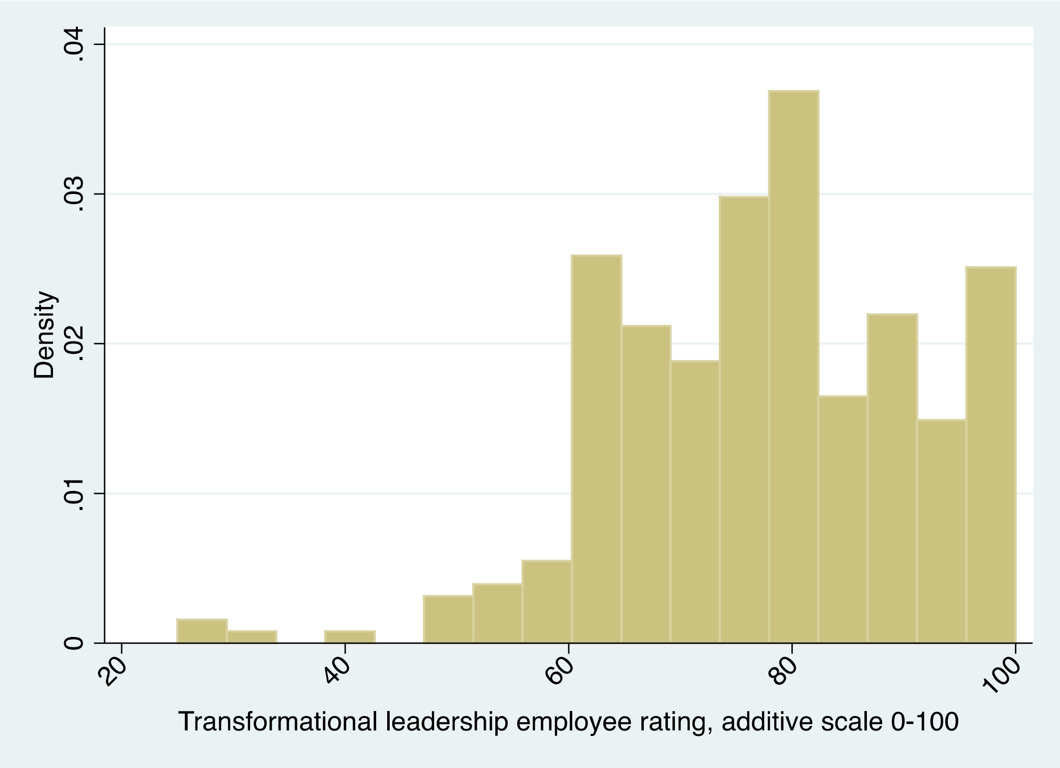
The distribution is highly left-skewed indicating that leaders in general perceive themselves to enact transformational leadership behaviors to very large degree (mean = 82.79).

Figure 6. Distribution of transformational leadership as reported by employees

Note: N = 10023, mean = 66.63, std. dev. = 21.81, min = 0, max = 100

The distribution is left-skewed. The mean value (66.63) is, however, considerably lower than the mean for leaders' self-reports (82.75). The distribution indicates that employees in general perceive their leaders to enact transformational leadership behaviors to a large degree.

Figure 7. Distribution of transformational leadership as reported by middle managers (daycare)



Note:. N = 289. Mean = 77.65, std. dev = 13.54 min = 25, max =100

The distribution is highly left-skewed indicating that middle managers in general perceive themselves to enact transformational leadership behaviors to very large degree (mean = 77.65).

Transactional Leadership (UTJ)

Transactional leadership is based on the exchange of contingent rewards and sanctions for pre-defined efforts (Podsakoff et al. 2006). Using rewards and sanctions to alter the costs and benefit of particular actions, the intention underlying transactional leadership is to make employees pursue their self-interest in a way that is beneficial to the organization. In sum, we define transactional leadership as the *use of contingent rewards and sanctions intended to create employee self-interest in achieving organization goals.*

Transactional leadership manifests in three unique and non-interchangeable components that resemble the use of three different instruments 1) contingent non-pecuniary rewards, 2) contingent pecuniary rewards, and 3) contingent sanctions. Survey measures capturing leaders' use of these instruments build mainly on existing studies (e.g. House 1998 and Jacobsen and Andersen 2013). One item is generated to capture the intention/perceived intention of the leader. The survey measures are distributed to leaders, employees and middle managers.

Table 14. Items measuring transactional leadership

#	**Contingent non-pecuniary rewards: As a leader I …**	
l_tala1	Give individual employees positive feedback when they perform well *Giver jeg individuelle medarbejdere positiv feedback, hvis de præsterer godt*	Modified from House 1998
l_tala2	Actively show my appreciation of employees who do their jobs better than expected *Viser jeg aktivt min påskønnelse af medarbejdere, der gør deres arbejde bedre end forventet*	Modified from House 1998
l_tala3	I generally do not acknowledge individual employees' even though they perform as required *Anerkender jeg som oftest ikke individuelle medarbejdere,*	Modified from House 1998

	selvom de præsterer som krævet	
l_tala4	Personally compliment employees when they do outstanding work *Roser jeg personligt medarbejdere, når de gør deres arbejde særlig godt*	Modified from House 1998
	Contingent pecuniary rewards: As a leader I …	
l_talb1	Reward the employees' performance, when they live up to my requirements *Belønner jeg medarbejdernes præstationer, når de lever op til mine krav*	Modified from Jacobsen and Andersen 2013
l_talb2	Reward the employees' dependent on how well they perform their jobs *Belønner jeg medarbejderne på baggrund af, hvor godt de præsterer deres arbejde*	Jacobsen and Andersen 2013
l_talb3	Point out what employees will receive if they do what is required *Gør jeg det klart, hvad medarbejderne vil modtage, hvis de lever op til kravene*	Bass et al. 2003
l_talb4	Let employees' effort determine received rewards *Lader jeg medarbejdernes indsats være afgørende for, hvilke belønninger, de modtager*	Modified from Rainey 2009
	Contingent sanctions: As a leader I …	
l_tals1	Give negative consequences to the employees if they perform worse than their colleagues *Lader jeg det få konsekvenser for medarbejderne, hvis de præsterer dårligere end deres kollegaer*	Own

l_tals2	Make sure that it has consequences for the employees, if they do not consistently perform as required *Sørger jeg for, at det får konsekvenser for medarbejderne, hvis de ikke vedvarende præsterer som krævet*	Modified from Jacobsen and Andersen 2013
l_tals3	Take steps to deal with poor performer who do not improve *Skrider jeg til handling over for dårligt præsterende medarbejdere, som ikke forbedrer sig*	Modified from Trottier et al. 2008
l_tals4	Give negative consequences to my employees if they do not perform as I require *Lader jeg det få konsekvenser for mine medarbejdere, hvis de ikke lever op til mine krav*	Own
	Contingent non-pecuniary rewards: My leader …	
tala1	Gives individual employees positive feedback when they perform well *Giver jeg individuelle medarbejdere positiv feedback, hvis de præsterer godt*	Modified from House 1998
tala2	Actively shows his/her appreciation of employees who do their jobs better than expected *Viser jeg aktivt min påskønnelse af medarbejdere, der gør deres arbejde bedre end forventet*	Modified from House 1998
tala3	Generally acknowledges individual employees' even though they perform as required *Anerkender jeg som oftest ikke individuelle medarbejdere, selvom de præsterer som krævet*	Modified from House 1998
tala4	Personally compliments employees when they do	Modified from House 1998

	outstanding work *Roser jeg personligt medarbejdere, når de gør deres arbejde særlig godt*	
	Contingent pecuniary rewards: My leader …	
talb1	Rewards the employees' performance, when they live up to his/her requirements *Belønner jeg medarbejdernes præstationer, når de lever op til mine krav*	Modified from Jacobsen and Andersen 2013
talb2	Rewards the employees' dependent on how well they perform their jobs *Belønner jeg medarbejderne på baggrund af, hvor godt de præsterer deres arbejde*	Jacobsen and Andersen 2013
talb3	Points out what employees will receive if they do what is required *Gør jeg det klart, hvad medarbejderne vil modtage, hvis de lever op til kravene*	Bass et al. 2003
talb4	Lets employees' effort determine received rewards *Lader jeg medarbejdernes indsats være afgørende for, hvilke belønninger, de modtage*	Modified from Rainey 2009
	Contingent sanctions: As a leader I …	
tals1	Gives negative consequences to the employees if they perform worse than their colleagues *Lader jeg det få konsekvenser for medarbejderne, hvis de præsterer dårligere end deres kollegaer*	Own
tals2	Makes sure that it has consequences for the employees, if they do not consistently perform as required.	Modified from Jacobsen and Andersen 2013

	Sørger jeg for, at det får konsekvenser for medarbejderne, hvis de ikke vedvarende præsterer som krævet	
tals3	Takes steps to deal with poor performer who do not improve *Skrider jeg til handling over for dårligt præsterende medarbejdere, som ikke forbedrer sig*	Modified from Trottier et al. 2008
tals4	Gives negative consequences to employees if they do not perform as he/she requires *Lader jeg det få konsekvenser for mine medarbejdere, hvis de ikke lever op til mine krav*	Own

Table 15. Factor analysis: Transactional leadership reported by leaders

	Pretext: As a leader I …	Factors		
		1	2	3
Contingent non-pecuniary rewards	Give individual employees positive feedback when they perform well		.751	
	Actively show my appreciation of employees who do their jobs better than expected		.680	
	I generally do not acknowledge individual employees' even though they perform as required (reversed)		-.375	
	Personally compliment employees when they do outstanding work		.690	
Contingent pecuniary rewards	Reward the employees' performance, when they live up to my requirements	.782		
	Reward the employees' dependent on how well they perform their jobs	.839		
	Point out what employees will receive if they do what is required	.586		
	Let employees' effort determine received rewards	.787		
Contingent sanctions	Give negative consequences to the employees if they perform worse than their colleagues			.536
	Make sure that it has consequences for the employees, if they do not consistently perform as required.			.681
	Take steps to deal with poor performer who do not improve			.570
	Give negative consequences to my employees if they do not perform as I require			.649

Note: Extraction method: Principal factor analysis with oblimin rotation. Loadings < .3 left blank. Reversed: Code is reversed. Three factors with an Eigenvalue higher than 1 was extracted. N = 784. Cronbach's alpha for items in factor 1 = .852. Cronbach's alpha for items in factor 2 = .710. Cronbach's alpha for items in factor 3 = .747. Cronbach's alpha for all items = .758.

Table 16. Factor analysis: Transactional leadership reported by employees

	Pretext: My leader …	Factors		
		1	2	3
Contingent non-pecuniary rewards	Gives individual employees positive feedback when they perform well	.890		
	Actively shows his/her appreciation of employees who do their jobs better than expected	.857		
	Generally acknowledges individual employees' even though they perform as required (reversed)	-.608		
	Personally compliments employees when they do outstanding work	.904		
Contingent pecuniary rewards	Rewards the employees' performance, when they live up to his/her requirements		.831	
	Rewards the employees' dependent on how well they perform their jobs		.863	
	Points out what employees will receive if they do what is required		.696	
	Lets employees' effort determine received rewards		.817	
Contingent sanctions	Gives negative consequences to the employees if they perform worse than their colleagues			.734
	Makes sure that it has consequences for the employees, if they do not consistently perform as required.			.850
	Takes steps to deal with poor performer who do not improve			.738
	Gives negative consequences to employees if they do not perform as he/she requires			.841

Note: Extraction method: Principal factor analysis with oblimin rotation. Loadings < .3 left blank. Reversed: Code is reversed. Three factors with an Eigenvalue higher than 1 was extracted. N = 9493. Cronbach's alpha for items in factor 1 = .901. Cronbach's alpha for items in factor 2 = .903. Cronbach's alpha for items in factor 3 = .887. Cronbach's alpha for all items = .855.

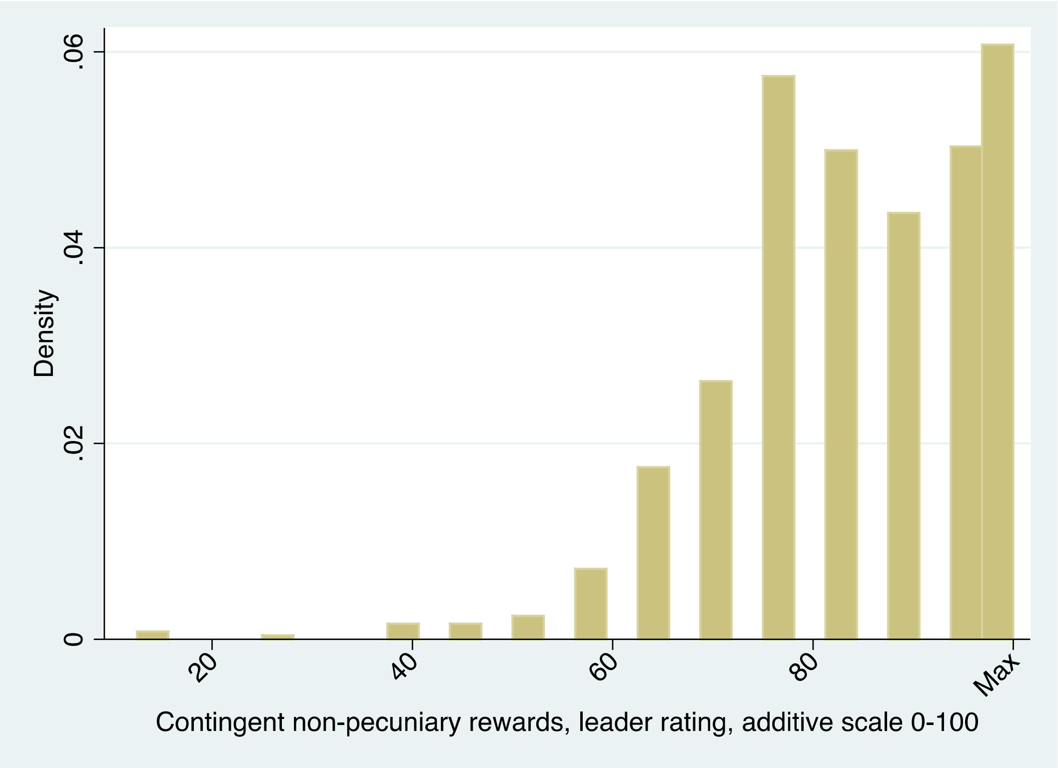
Table 17. Factor analysis: Transactional leadership reported by middle managers (daycare)

	Pretext: As a leader I …	Factors		
		1	2	3
Contingent non-pecuniary rewards	Give individual employees positive feedback when they perform well		.813	
	Actively show my appreciation of employees who do their jobs better than expected		.735	
	I generally do not acknowledge individual employees' even though they perform as required (reversed)		-.309	
	Personally compliment employees when they do outstanding work		.772	
Contingent pecuniary rewards	Reward the employees' performance, when they live up to my requirements	.865		
	Reward the employees' dependent on how well they perform their jobs	.905		
	Point out what employees will receive if they do what is required	.780		
	Let employees' effort determine received rewards	.899		
Contingent sanctions	Give negative consequences to the employees if they perform worse than their colleagues			.625
	Make sure that it has consequences for the employees, if they do not consistently perform as required.			.741
	Take steps to deal with poor performer who do not improve		.365	.527
	Give negative consequences to my employees if they do not perform as I require			.747

Note: Extraction method: Principal factor analysis with oblimin rotation. Loadings < .3 left blank. Reversed: Code is reversed. Three factors with an Eigenvalue higher than 1 was extracted. N = 784. Cronbach's alpha for items in factor 1 = .928. Cronbach's alpha for items in factor 2 = .722. Cronbach's alpha for items in factor 3 = .827. Cronbach's alpha for all items = .837.

The factor loadings across leaders, employees and middle managers are all satisfactory and all items in each instrument are used to construct indexes.

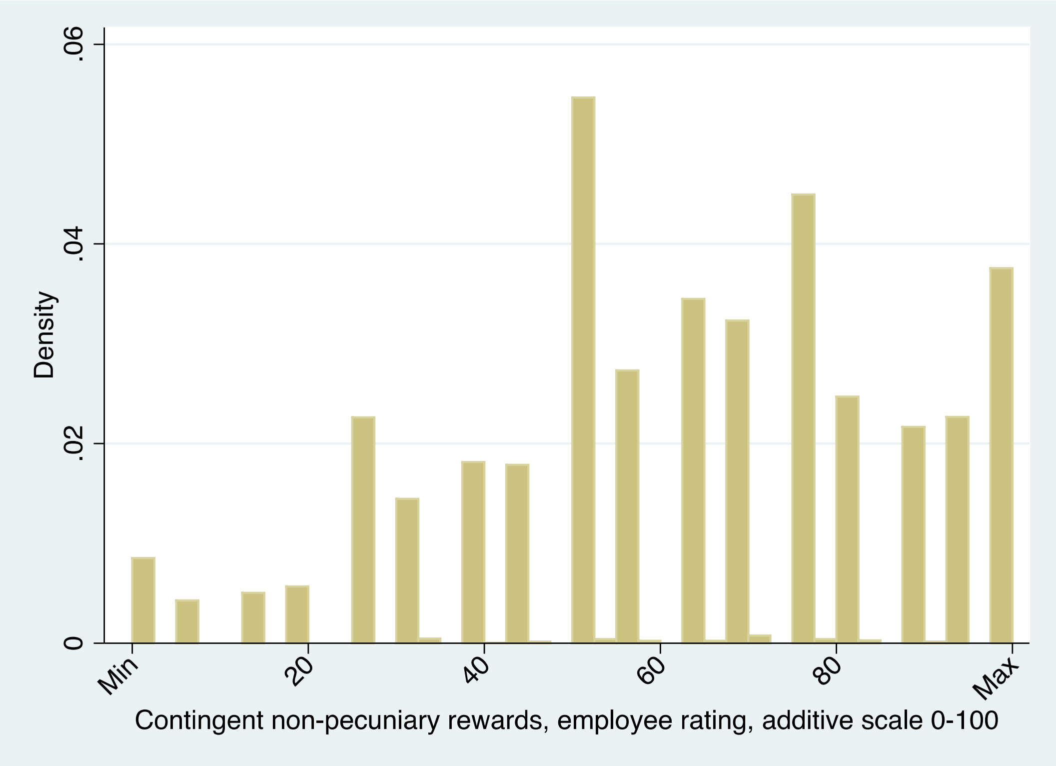
Figure 8. Distribution of use of contingent non-pecuniary rewards as reported by leaders



Note: N = 801. Mean = 83.01 , std. dev = 13.66 min = 12.5, max =100

The distribution is highly skewed indicating that leaders in general perceive themselves to use contingent non-pecuniary rewards to very large degree (mean = 83.01).

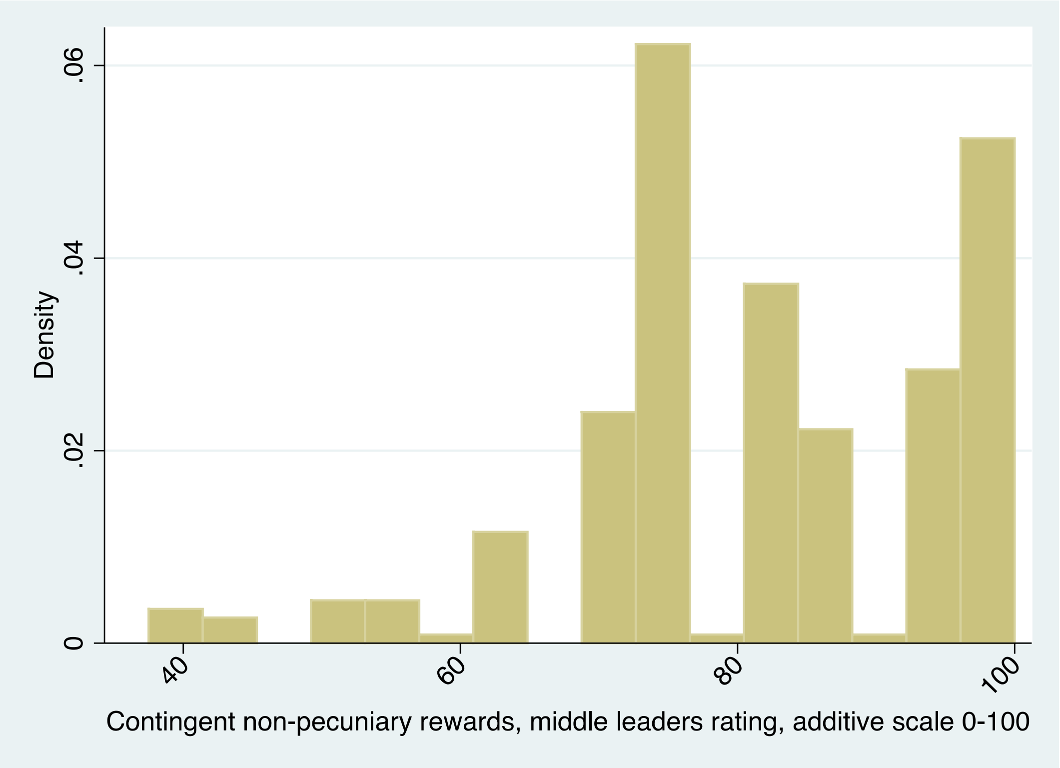
Figure 9. Distribution of use of contingent non-pecuniary rewards as reported by employees



Note: N = 10011. mean = 61.89, std. dev. = 24.97, min = 0, max = 100

The distribution is left-skewed with one notable peak at the maximum score of the scale. The mean value is 61.89 indicating that employees in general perceive their leader to use contingent non-pecuniary rewards to a considerable degree in their organizations. The mean value, however, is lower than the one reported by the leaders (82.86).

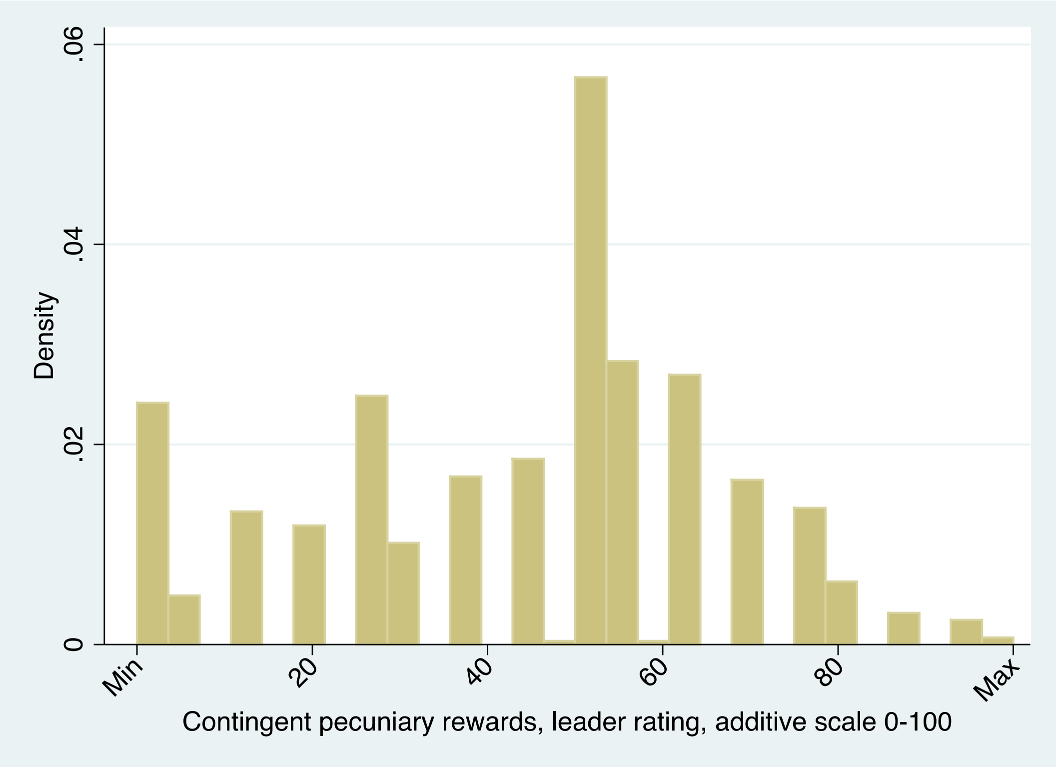
Figure 10. Distribution of use of contingent non-pecuniary rewards as reported by middle managers



Note: N = 288. Mean = 81.45 , std. dev = 14.30 min = 37.5, max =100

The distribution is highly skewed indicating that middle managers in general perceive themselves to use contingent non-pecuniary rewards to very large degree (mean = 81.45).

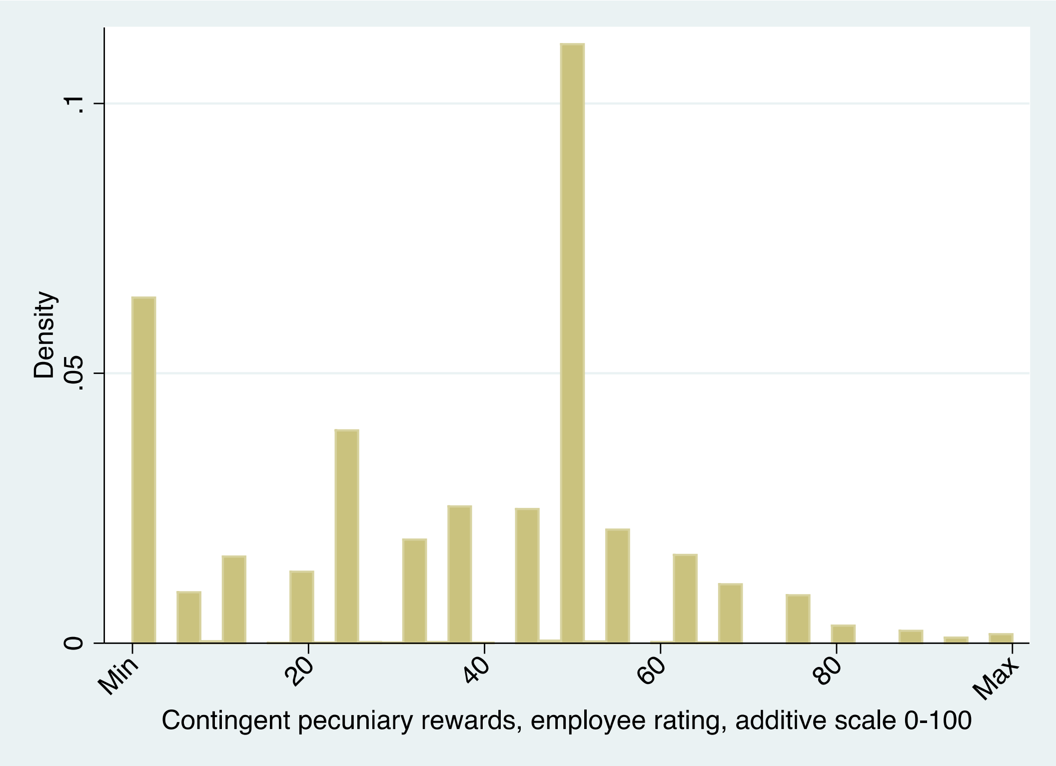
Figure 11. Distribution of use of contingent pecuniary rewards as reported by leaders



Note: N = 800. mean = 43.55, std. dev. = 22.97, min = 0, max = 100

The scale approaches normal distribution (mean = 43.72), particularly with respect to observations ranging from the theoretical mid point (50) to the theoretical maximum of the scale (100). An edge peak at the lower limit shows that a bulk of leaders does not use contingent pecuniary rewards at all. This can likely be attributed to the fact, that opportunities to reward employees with tangibles are rare or non-existing in some of the investigated sectors.

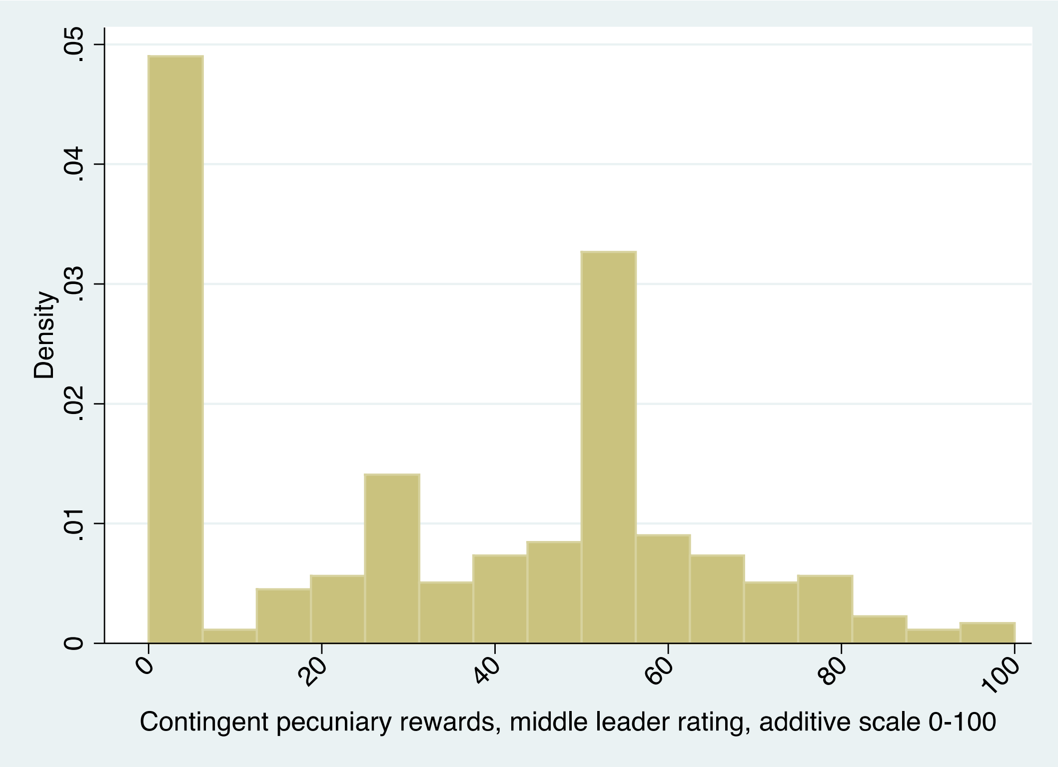
Figure 12. Distribution of use of contingent pecuniary rewards as reported by employees



Note: N = 9873. mean = 36.17, std. dev. = 22.73, min = 0, max = 100

The distribution (mean = 36.18) is very similar to the distribution for leaders' self-reported use of contingent pecuniary rewards (see Figure 12). Two peaks are identified. A bulk of observations centers on the midpoint of the scale (50) and on the lower limit. The distribution suggests that the use of contingent pecuniary rewards are limited in some the investigated organizations.

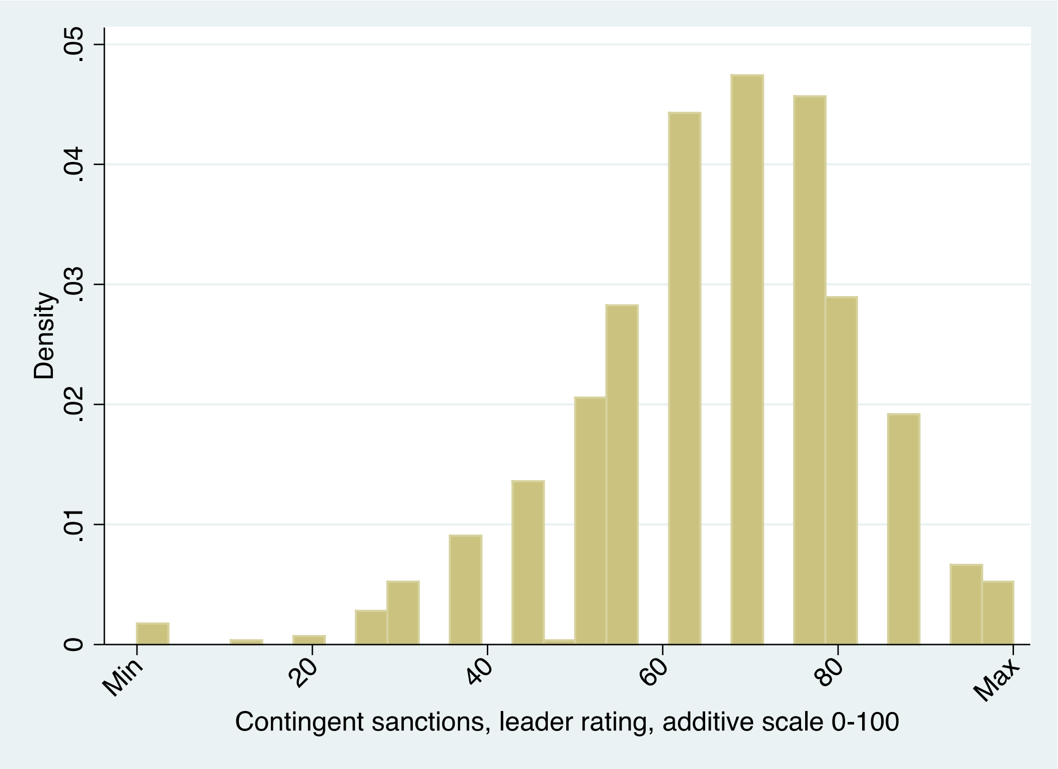
Figure 13. Distribution of use of contingent pecuniary rewards as reported by leaders



Note: N = 284. mean = 32.14, std. dev. = 26.51, min = 0, max = 100

The scale shows an edge peak at the lower limit shows that a bulk of leaders does not use contingent pecuniary rewards at all. This can likely be attributed to the fact, that opportunities to reward employees with tangibles are rare or non-existing for the middle managers in the daycare sector. Apart from the lower bulk, there are a considerable amount of middle managers that report using pecuniary rewards around the theoretical mid-point (50).

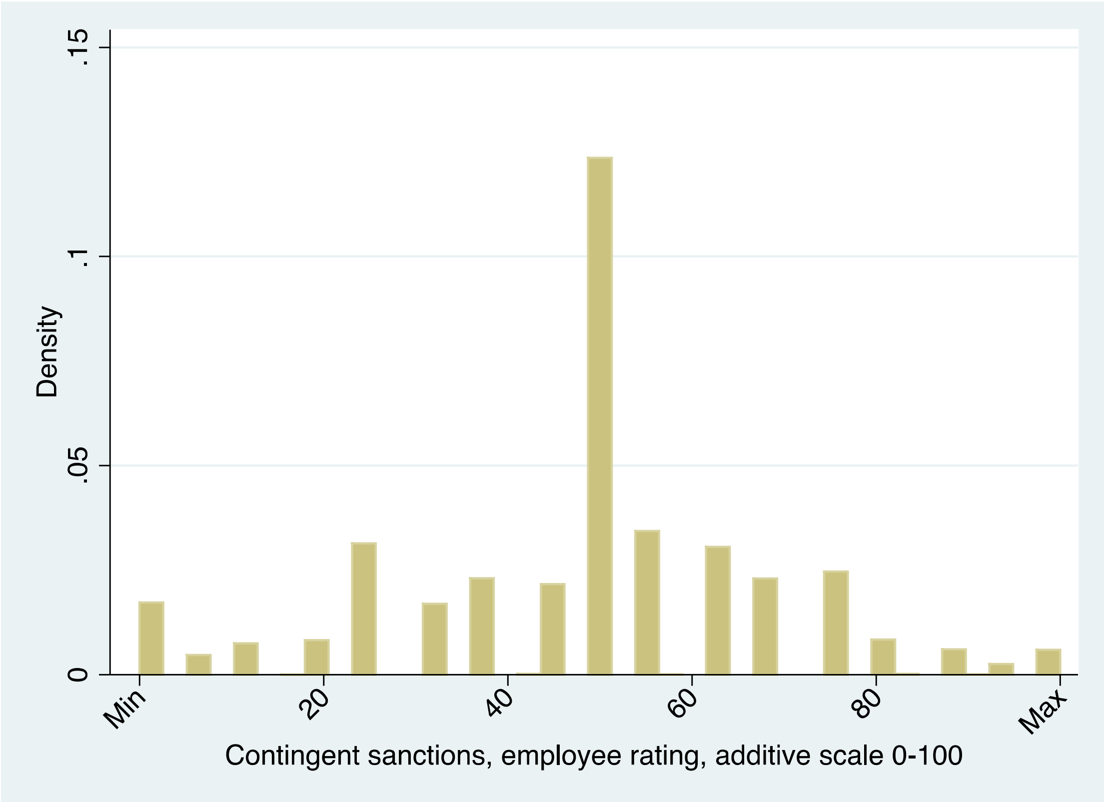
Figure 14. Distribution of use of contingent sanctions as reported by leaders



Note: N = 803. mean = 65.89, std. dev. = 16.34, min = 0, max = 100

The distribution of the scale is left-skewed suggesting that leaders in general perceive themselves to make use of contingent sanction in their organizations quite often (mean = 65.89).

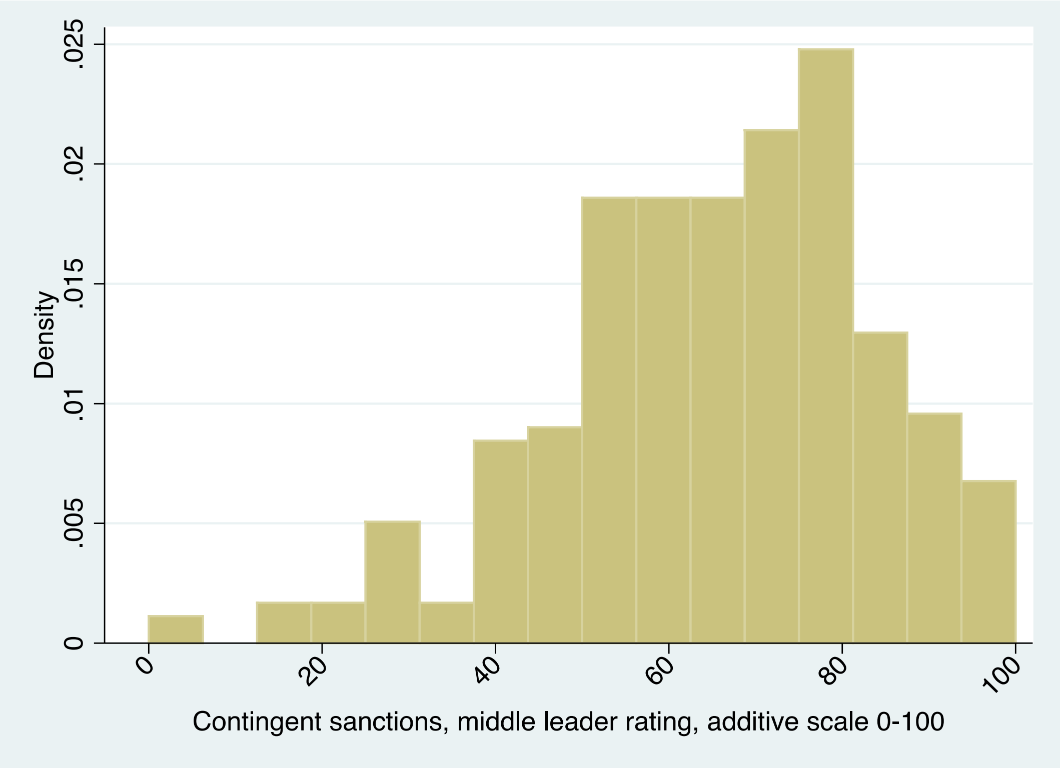
Figure 15. Distribution of use of contingent sanctions as reported by employees



Note. N = 9755, mean = 48.49, std. dev. = 20.59, min = 0, max = 100

Unlike the distribution for leaders' self-reported use contingent sanctions (see figure 14), the distribution for employees' reports is not skewed. It approaches a normal distribution with a large peak centered on the mid point (50). The mean value, 48.49, is also considerably lower than the one reported by the leaders (65.92).

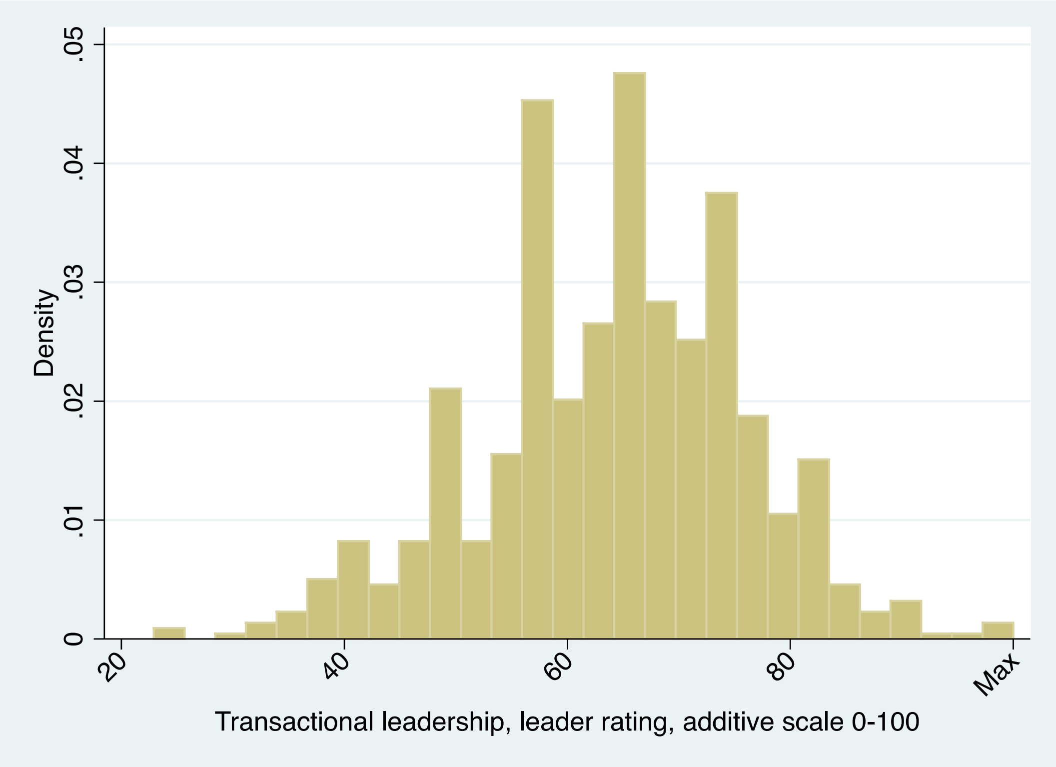
Figure 16. Distribution of use of contingent sanctions as reported by middle managers (daycare)



Note: N = 284, mean = 62.26, std. dev. = 18.76, min = 0, max = 100

The distribution of the scale is left-skewed suggesting that middle managers in general perceive themselves to make use of contingent sanction in their organizations quite often (mean = 62.26).

Figure 17. Distribution of transactional leadership as reported by leaders



Note: Second-order formative scale comprised of contingent non-pecuniary rewards, contingent pecuniary rewards and contingent sanctions components. N = 794. mean = 64.13 , std. dev. = 11.97, min = 22.92, max = 100

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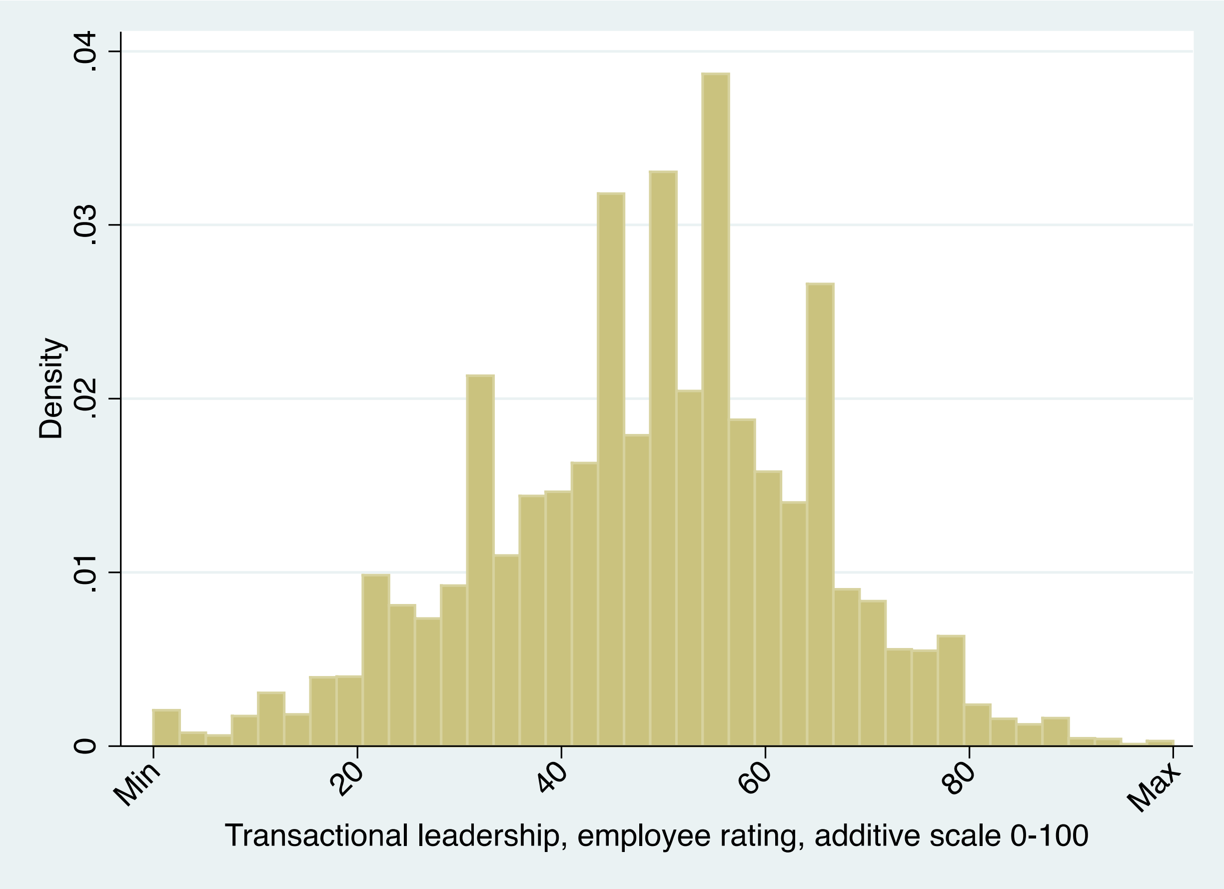
The distribution of a second-order transactional leadership construct is slightly left-skewed (mean = 64.13) with a couple of peaks on both sides of the mean value.

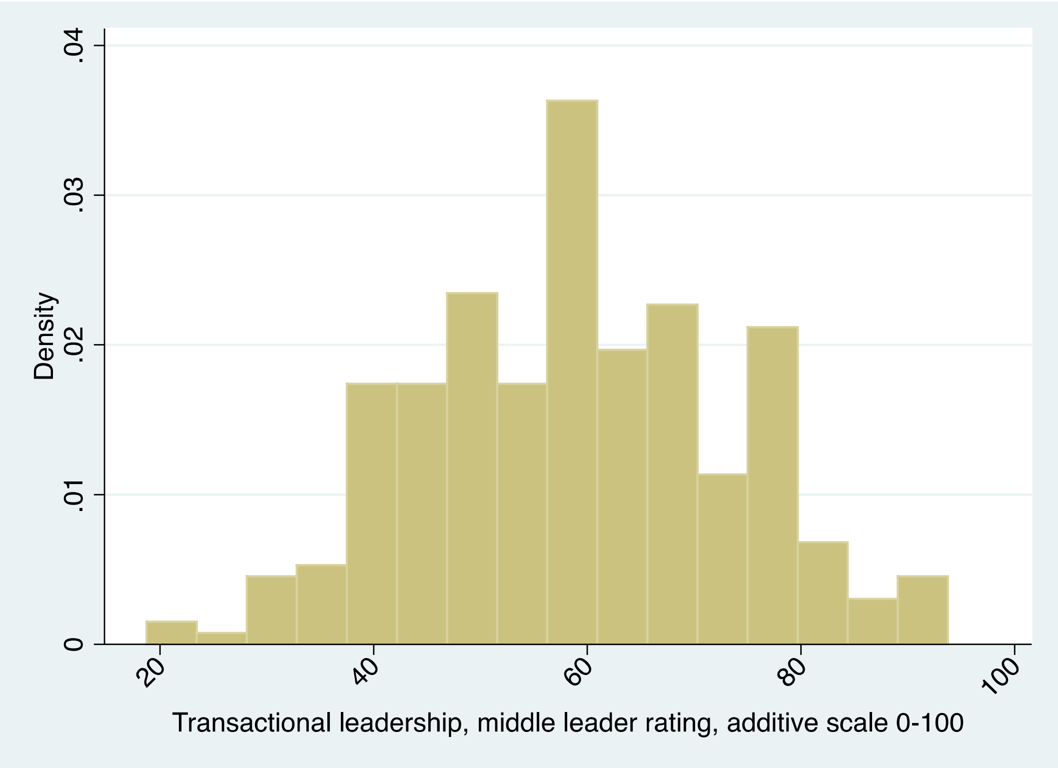
Figure 18. Distribution of transactional leadership as reported by employees.



Note: Second-order formative scale comprised of contingent non-pecuniary rewards, contingent pecuniary rewards and contingent sanctions components. N = 9675. mean = 48.74, std. dev. = 16.18, min = 0, max = 100

The distribution of a second-order transactional leadership construct approaches a normal distribution. A couple of peaks are identified on either side of the mean value of 48.74.

Figure 19. Distribution of transactional leadership as reported by middle managers



Note: Second-order formative scale comprised of contingent non-pecuniary rewards, contingent pecuniary rewards and contingent sanctions components. N = 282. mean = 58.69 , std. dev. = 14.49, min = 18.75, max = 93.75

The distribution of a second-order transactional leadership approaches a normal distribution (mean = 58.69) with a couple of peaks on both sides of the mean value.

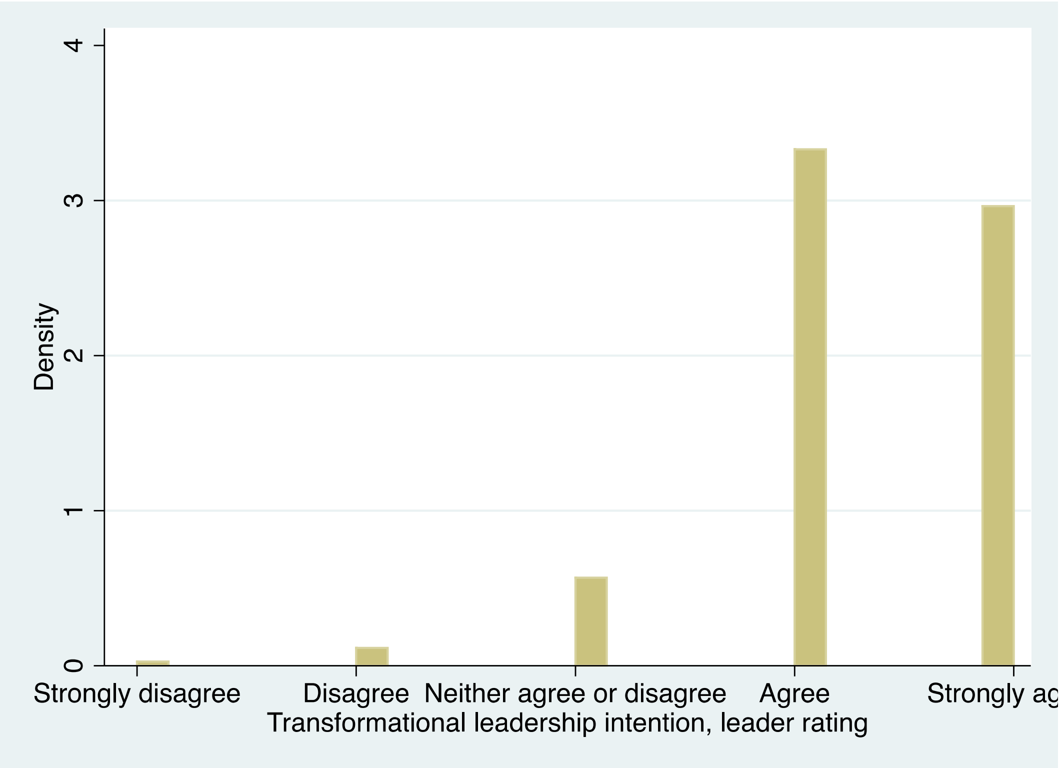
Leadership Intention (UTJ)

Transformational leadership intention:

Table 18. Item measuring transformational leadership intention (leader)

	Leaders: As a leader I …	
l_itfl	Seek to make it a goal in itself for the employees to work towards achieving the [ORGANIZATION TYPES] goals *Forsøger jeg at gøre det til et mål i sig selv for medarbejderne at arbejde for at opnå [ORGANISATIONENS] mål*	Own
	Employees: My leader …	
itfl	Seeks to make it a goal in itself for the employees to work towards achieving the [ORGANIZATION TYPES] goals Forsøger at gøre det til et mål i sig selv for medarbejderne at arbejde for at opnå [ORGANISATIONENS] mål	Own

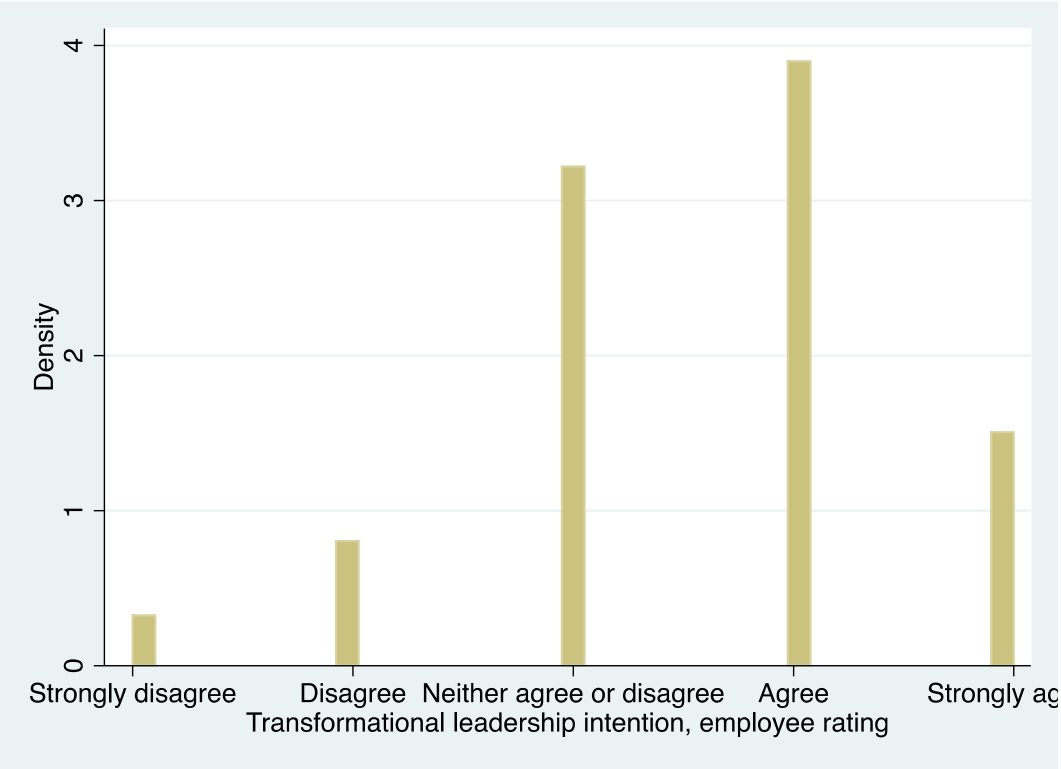
Figure 20. Distribution of transformational leadership intention as reported by leader



Note: N = 803, mean = 4.30, std. dev. = .72 ,min = 1, max = 5

The vast majority of leaders agrees or strongly agrees that they seek to make it a goal in itself for the employees to work towards achieving the goals of the organization (mean = 4.30 with 5 as the maximum score).

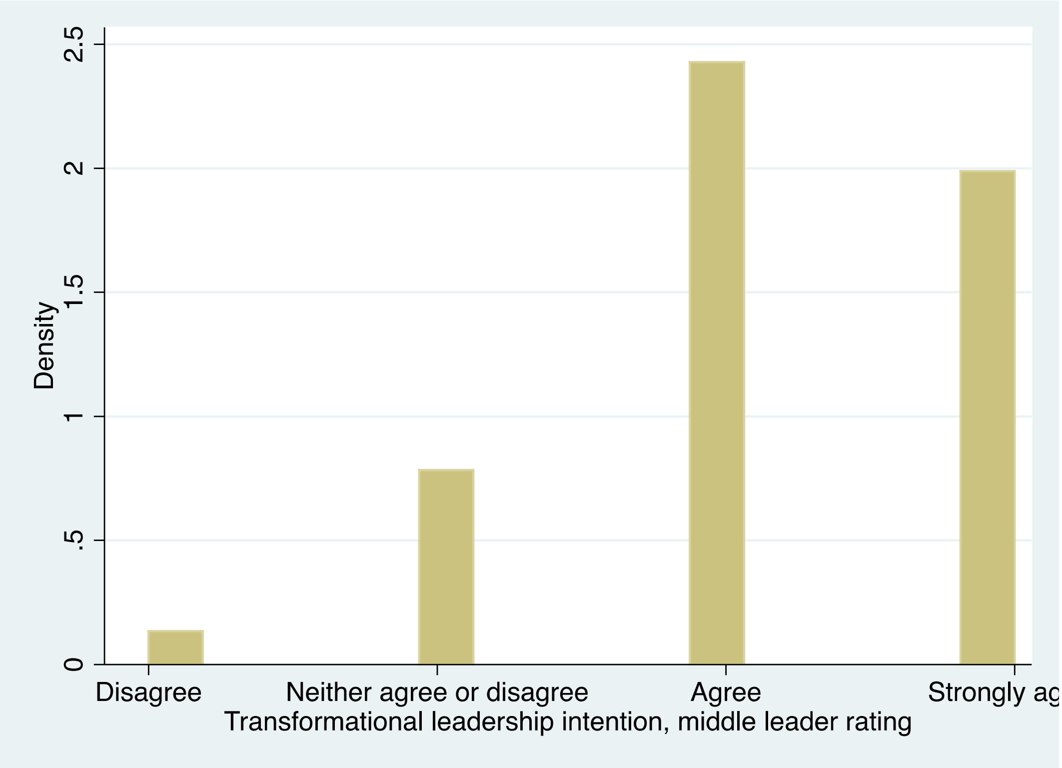
Figure 21. Distribution of transformational leadership intention as reported by employees



Note: N =9748, mean = 3.56, std. dev. = .96 ,min = 1, max = 5

The majority of employees agrees or strongly agrees that their leader seeks to make it a goal in itself for the employees to work towards achieving the goals of the organization (mean = 3.56 with 5 as the maximum score).

Figure 22. Distribution of transformational leadership intention as reported by middle managers



Note: N = 279, mean = 4.18, std. dev. = .77 ,min = 2, max = 5

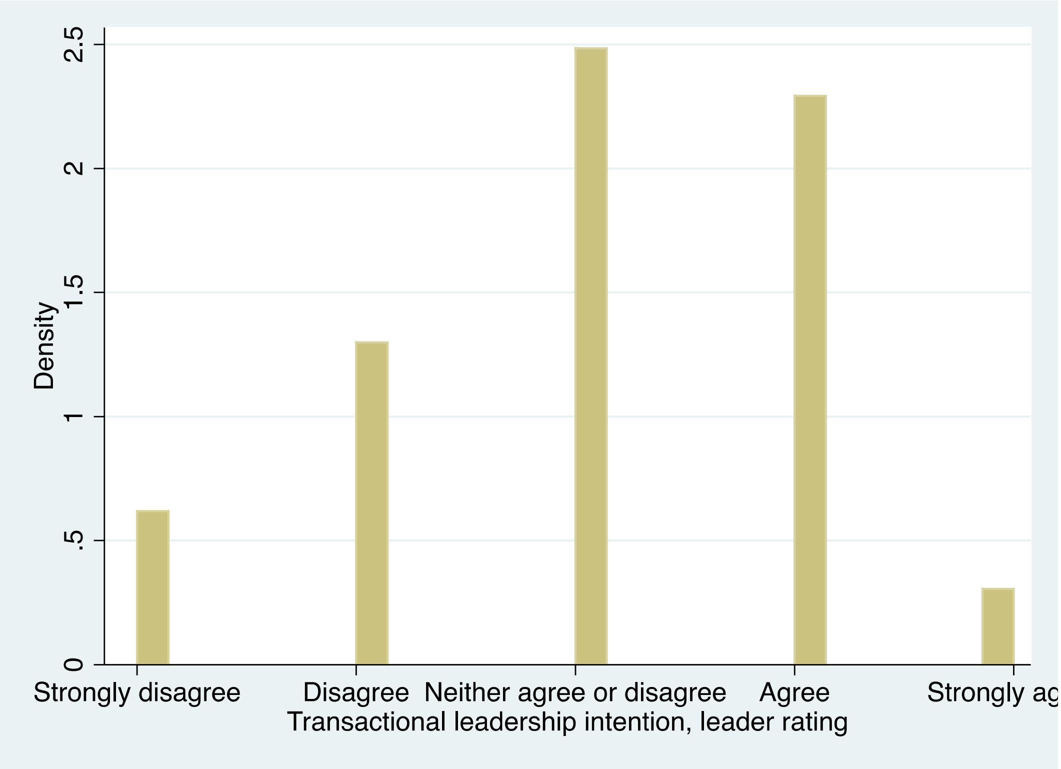
The vast majority of middle managers agrees or strongly agrees that they seek to make it a goal in itself for the employees to work towards achieving the goals of the organization (mean = 4.18 with 5 as the maximum score).

Transactional leadership intention:

Table 19. Item measuring transactional leadership intention

	Leaders: As a leader I …	
l_ital	Seek to make sure that it has consequences for individual employees whether they work towards achieving the [ORGANIZATION TYPES] goals *Forsøger jeg at sikre, at det har konsekvenser for de enkelte medarbejdere, hvorvidt de arbejder for at opnå [ORGANISATIONENS] mål*	Own
	Leaders: My leader …	
ital	Seeks to make sure that it has consequences for individual employees whether they work towards achieving the [ORGANIZATION TYPES] goals *Forsøger at sikre, at det har konsekvenser for de enkelte medarbejdere, hvorvidt de arbejder for at opnå [ORGANISATIONENS] mål*	Own

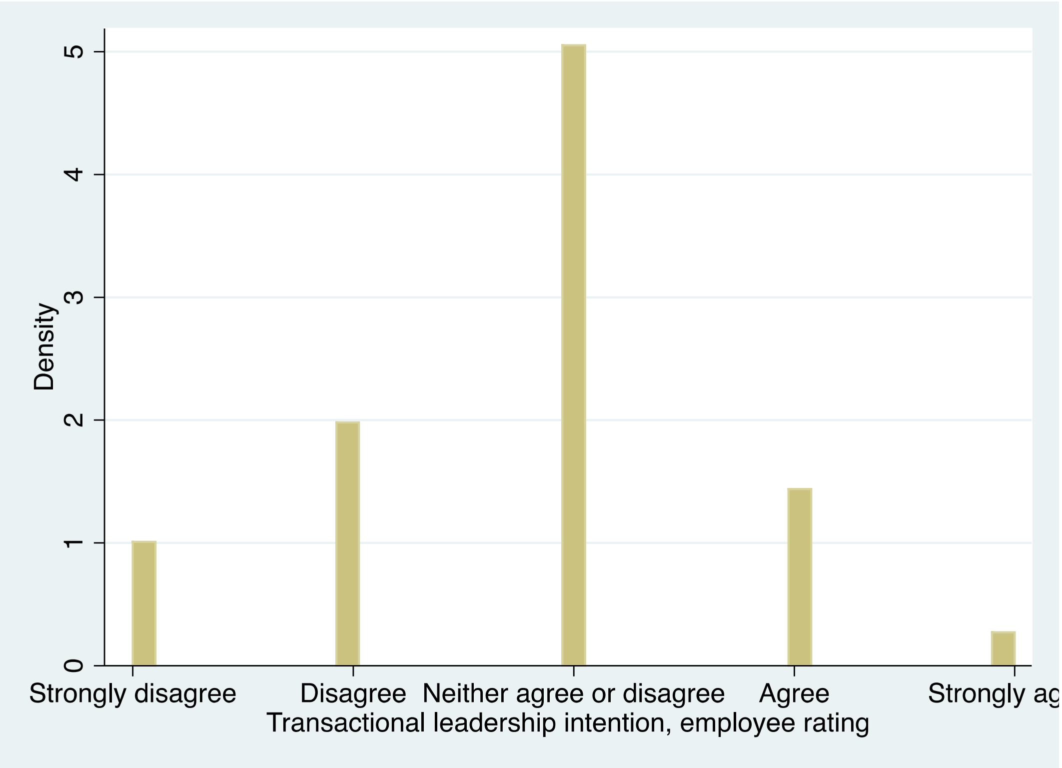
Figure 23. Distribution of transactional leadership intention as reported by leader



Note: N = 803, mean = 3.05, std. dev. = 1.02, min = 1, max =5

The distribution for the transactional leadership intention is roughly symmetrical (mean 3.05) indicating that leaders to varying degrees seek to make sure that it has consequences for individual employees whether they work towards achieving the goals of the organization.

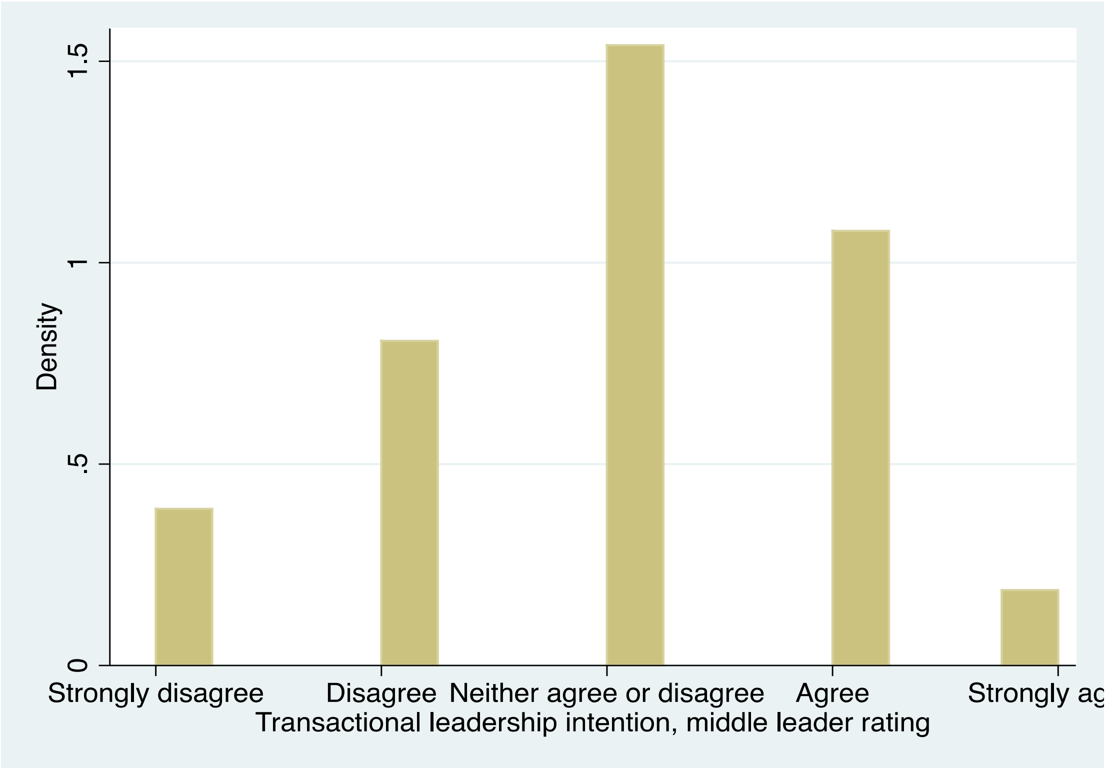
Figure 24. Distribution of transactional leadership intention as reported by employees



Note: N = 9654, mean = 2.79, std. dev. = .91 min = 1, max =5

The distribution for the transactional leadership intention as reported by employees is slightly asymmetrical as more employees disagree than agree that their leader seeks to make sure that it has consequences for individual employees whether they work towards achieving the goals of the organization. The mean value is 2.79, which also reflects the high number of employees in the 'neither agree or disagree' category.

Figure 25. Distribution of transactional leadership intention as reported by middle managers



Note: N = 278, mean = 2.97, std. dev. = 1.02, min = 1, max =5

The distribution for the transactional leadership intention is roughly symmetrical (mean 2.97) indicating that middle managers to varying degrees seek to make sure that it has consequences for individual employees whether they work towards achieving the goals of the organization.

Contingent Tools to Reward Employees' Good Results (NWM)

Leaders may use a variety of tools to reward employees based on their effort and results. The specific tools available to the leader may vary within and particularly between sectors. For example, the use of monetary incentives is very limited in day care centers but it may be a tool for leaders in tax offices. To identify which tools leaders use to reward their employees, we asked them to rate how often they use a number of different pecuniary and non-pecuniary tools.

Table 20. Contingent tools to reward employees' good results (leaders)

	Not at all (1)	To lesser extent	To some extent	To a high extent	To a very high extent (5)	Mean	N
General wage supplements	37.84	27.79	23.7	8.56	2.11	2.09	806
One-time bonuses	44.4	21.89	21.52	8.58	3.61	2.05	804
Promotions	44.96	26.65	20.80	6.35	1.25	1.92	803
Courses and education	9.33	15.42	35.82	31.09	8.33	3.14	804
Degree of self-determination	4.97	5.84	19.25	44.72	25.22	3.79	805
Assignment of attractive work tasks	11.43	14.66	33.79	29.32	10.81	3.13	805
Fringes (e.g. work phone, tablet, newspapers)	74.47	13.82	8.22	2.99	0.50	1.41	803
Informal reprimands	11.85	34.16	38.9	13.09	2.00	2.59	802
Formal reprimands	6.75	39.00	39.00	13.88	1.38	2.64	800
Dismissal	19.85	47.52	26.55	5.33	0.74	2.19	806

Table 21. tools to reward employees' good results (employees)

	Not at all (1)	To lesser extent	To some extent	To a high extent	To a very high extent (5)	Mean	N
General wage supplements	51.05	23.35	20.11	4.60	0.90	1.81	8913
One-time bonuses	58.62	18.36	17.27	4.55	1.20	1.71	8927
Promotions	57.27	22.79	16.66	2.71	0.56	1.67	8881
Courses and education	18.76	22.26	35.10	17.97	5.92	2.70	9009
Degree of self-determination	13.64	13.88	29.38	31.31	11.79	3.14	8979
Assignment of attractive work tasks	26.43	22.37	33.51	14.20	3.49	2.46	8910
Fringes (e.g. work phone, tablet, newspapers)	70.52	13.45	11.50	3.52	1.01	1.51	8998
Informal reprimands	23.67	35.06	31.15	7.96	2.16	2.30	8842
Formal reprimands	22.65	36.69	30.56	7.99	2.11	2.30	8858
Dismissal	46.39	31.14	17.87	3.54	1.06	1.82	8842

Stakeholder influence (PAN)

Stakeholders in the organizational environment can shape organizational reputation, resource availability, policies and programs selected, and agency leadership (Carpenter and Krause 2012). Our measurement builds on one item from Moynihan & Hawes (2012), but differentiates between different kinds of stakeholders. We thus use three items to focus on, respectively, hierarchical superiors, employees, and clients/customers. The relevant stakeholders will depend on the particular type of organization under study, so the specific items have been adapted accordingly to the five different sectors. The three items are not expected to form a reflexive index, and unreported factor analyses indeed show that there is no common factor structure.

Table 22. Stakeholder influence, item

		Source
Pretext	In my [organization] we are focused on continually adjusting our internal activities and structures in response to demands or requests from …. *I min [ORGANISATION] er vi meget opmærksomme på løbende at tilpasse vores interne organisation og aktiviteter til krav eller ønsker fra…*	Moynihan & Hawes (2012)
l_sti1	[hiearachical superiors] (the munipal administration/the the board, etc.) *[hierarkiske overordnede] (kommunen, administrationen, bestyrelsen)*	Own
l_sti2	Our employees *Vores medarebejdere*	Own
l_sti3	[our users] (parents, citizen/clients, customers) *[Vores brugere] (forældre, borgere/klienter, kunder)*	Own

Table 23. Stakeholder influence, distribution

	Strongly disagree (1)	Disagree	Neither agree or disagree	Agree	Strongly agree (5)	Mean	N
[hiearachical superiors] (the munipal administration/the the board, etc.)	2.11	3.48	7.09	46.89	40.42	4.20	804
Our employees	1.62	8.33	14.68	54.73	20.65	3.84	804
[our users] (parents, citizen/clients, customers)	1.49	5.23	14.32	52.05	26.9	3.98	803

Cross-Pressure (LLB)

Many leaders are placed in the middle of a chain-of-command in which they are handling the exchange of directives from the higher management level and ideas, demands and reactions from their employees (McConville 2006, Carlström 2012, Brewer 2005). Since the needs and demands of the level above and the level below are often in conflict, many leaders frequently experience role overload, conflict of interests and a cross-pressure feeling (McConville 2006, Berg & Hout 2007; Carlström 2012, Klausen 2007). According to Klausen (2007), cross-pressure can arise from three different leader identity-dilemmas. (1) a logical dilemma describing whether one identifies as a leader or as an colleague, (2) an ethical dilemma describing whether one identifies with the trade-profession or leader-profession (where to anchor leader decisions?) and (3) a moral dilemma describing whether one identifies with the unit that one leads or the overall administration-area (e.g. municipality) that the unit is embedded in (a sort of hierarchical dilemma).

In order to capture the identification of the leaders in the three different kinds of cross-pressure identity-dilemmas and how the employees perceive their leader on these dimensions, leaders were asked on a scale from 0-10 to assess which of the opposing identities mattered most, while employees were asked to rank their perception of their leader on the scales. Leaders and employees from the five participating LEAP-sectors (the primary and secondary school sector, the daycare sector, tax sector and bank sector) were asked to assess their identity according to the logical and ethical dilemma, whereas only leaders and employees with leaders embedded in a clear administration -area structure were asked according to the moral dilemma (this excludes leaders and employees from the private school sector and private daycare sector as these are not embedded in a clear municipal administration-structure like their public counterparts).

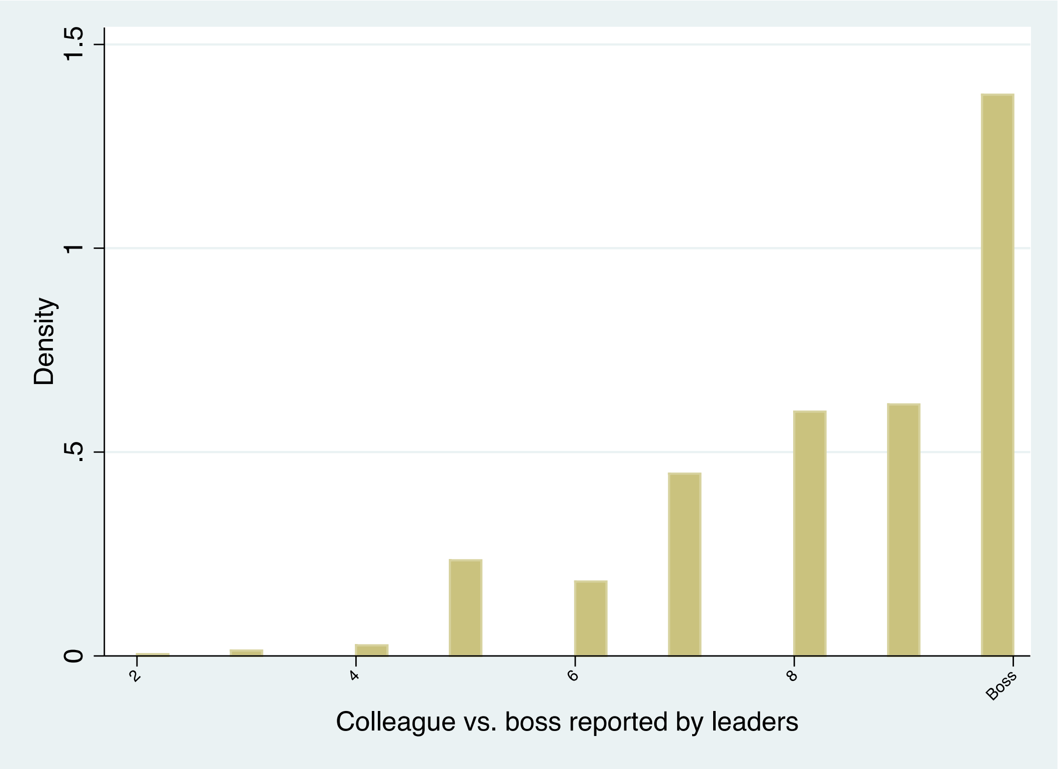
In order to get a sense of the actual experienced chain-of-command cross-pressure, leaders were also asked on a scale from 0-10 to assess how often they experienced having to handle irreconcilable interests from their employees and their superiors. Because some leaders handle the cross pressure that arises from the position "in between" by focusing more on either the demands from their own managers (alignment with the level above) or on the demands from the employees (alignment with the level below) (Berg & Hout 2007; Carlström 2012), the leaders were also asked to assess on a scale from 0-10, how they typically focus in such conflict situations. All leaders from the five participating LEAP-sectors (the primary and lower secondary school sector, the upper secondary school sector, the daycare sector, tax sector and bank sector) were asked.

The Logical Identity Dilemma

Table 24. The logical identity-dilemma

	Leaders	Source
l_lir	On a scale from 0-10, how would you assess your identity as a colleague in relation to your identity as boss? (by colleague we mean employees in the organization – not leaders at the same management level as you) (0 was worded = “my identity as a colleague is clearly most important”, 10 was worded = “my identity as a boss is clearly most important”) På en skala fra 0-10, hvordan vil du da vurdere din identitet som kollega i forhold til din identitet som chef? (med kollega menes medarbejdere på institutionen – dvs. ikke ledere på samme ledelsesniveau som dig) (0 lød = ”Min identitet som kollega er klart vigtigst”, 10 lød = min identitet som chef er klart vigtigst”).	Own
	Employees	
lir	How do you perceive your leader on a scale from 0-10, where 0 is colleague and 10 is boss? (0 was worded = “I exclusively perceive my leader as a colleague”, 10 was worded = “I exclusively perceive my leader as a boss”) *Hvordan opfatter du din leder på en skala fra 0-10, hvor 0 er kollega og 10 er chef (0 lød = ”Jeg opfatter udelukkende min leder som kollega”, 10 lød = ”Jeg opfatter udelukkende min leder som chef”)*	Own

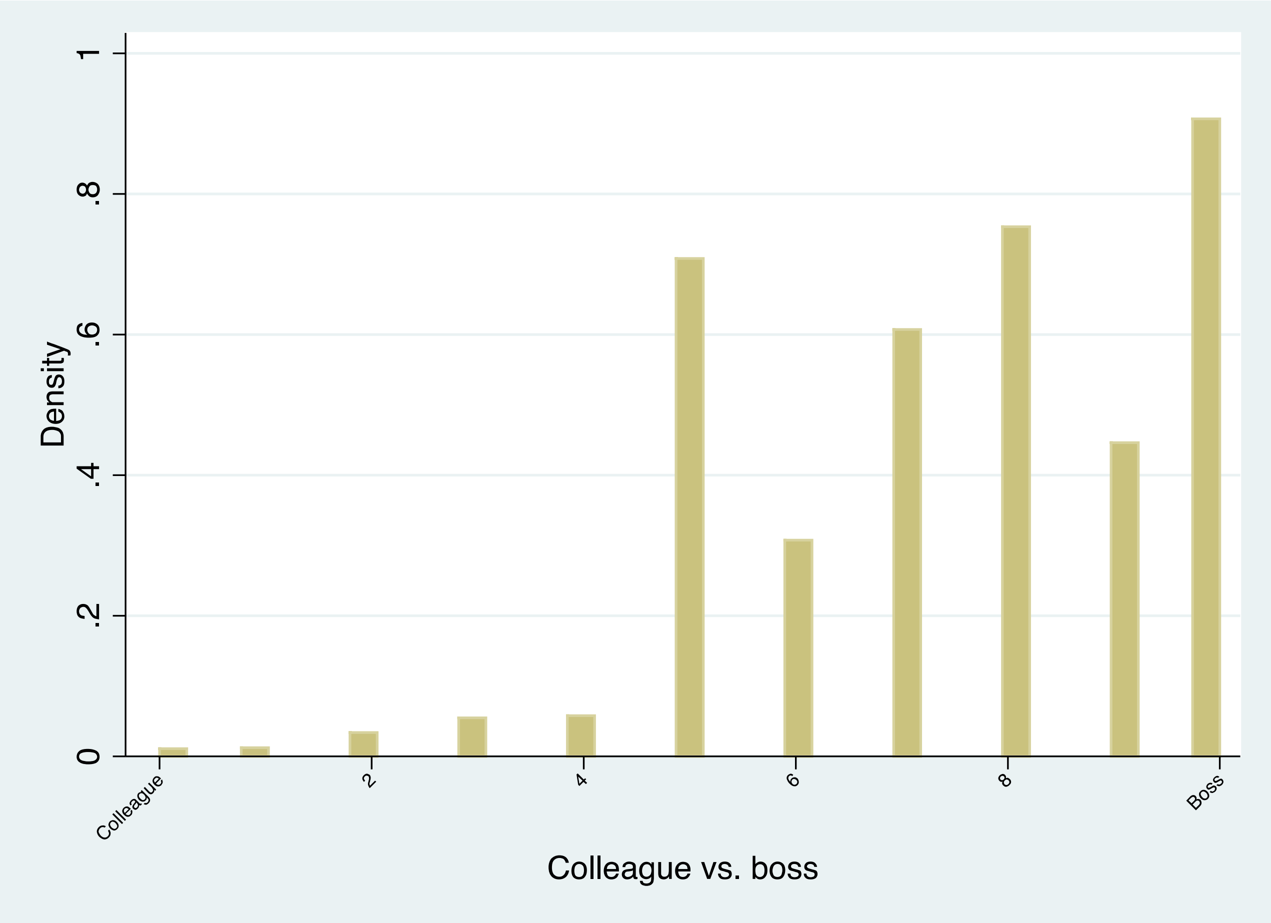
Figure 26. The logical identity-dilemma, leaders – distribution



Note: N=806, mean= 8.47, std.dev = 1.65, min=2, max=10

The distribution is skewed to the left with a mean of 8.47 indicating that most of the leaders consider their identity as a boss as more important than their identity as a colleague.

Figure 27. The logical identity-dilemma, employees – distribution



Note: N=9576, mean = 7.49 , std.dev = 2.03, min = 0, max = 10.

The distribution is skewed to the left with a mean of 7.49 indicating that most of the employees perceive their leader as the boss as opposed to a colleague.

The Ethical Identity-Dilemma

Table 25. The ethical identity-dilemma

	Leaders	Source
l_lif	On a scale from 0-10, how would you assess your professional [profession]* identity in relation to your identity as a general leader? (0 was worded “my [profession] identity is clearly most important”, 10 was worded = “my identity as a general leader is clearly most important”) *På en skala fra 1-10, hvordan vil du da vurdere din fagprofessionelle [professionsnavn]* identitet i forhold til din identitet som generel leder? (0 lød = ”Min fagprofessionelle [professionsnavn]identitet er klart vigtigst”, 10 lød= ”Min identitet som generel leder er klart vigtigst”)*	Own
	Employees	
Lif	How do you perceive your leader on a scale from 0-10, where 0 is professional profession leader and 10 is general leader (0 was worded = “I exclusively perceive my leader as a profession leader” and 10 was worded = “I exclusively perceive my leader as a general leader”). *Hvordan opfatter du din leder på en skala fra 0-10, hvor 0 er fagprofessionel leder, og 10 er generel leder? (0 lød = ”Jeg opfatter udelukkende min leder som fagprofessionel leder”, 10 lød = ”jeg opfatter udelukkende min leder som generel leder”)*	Own

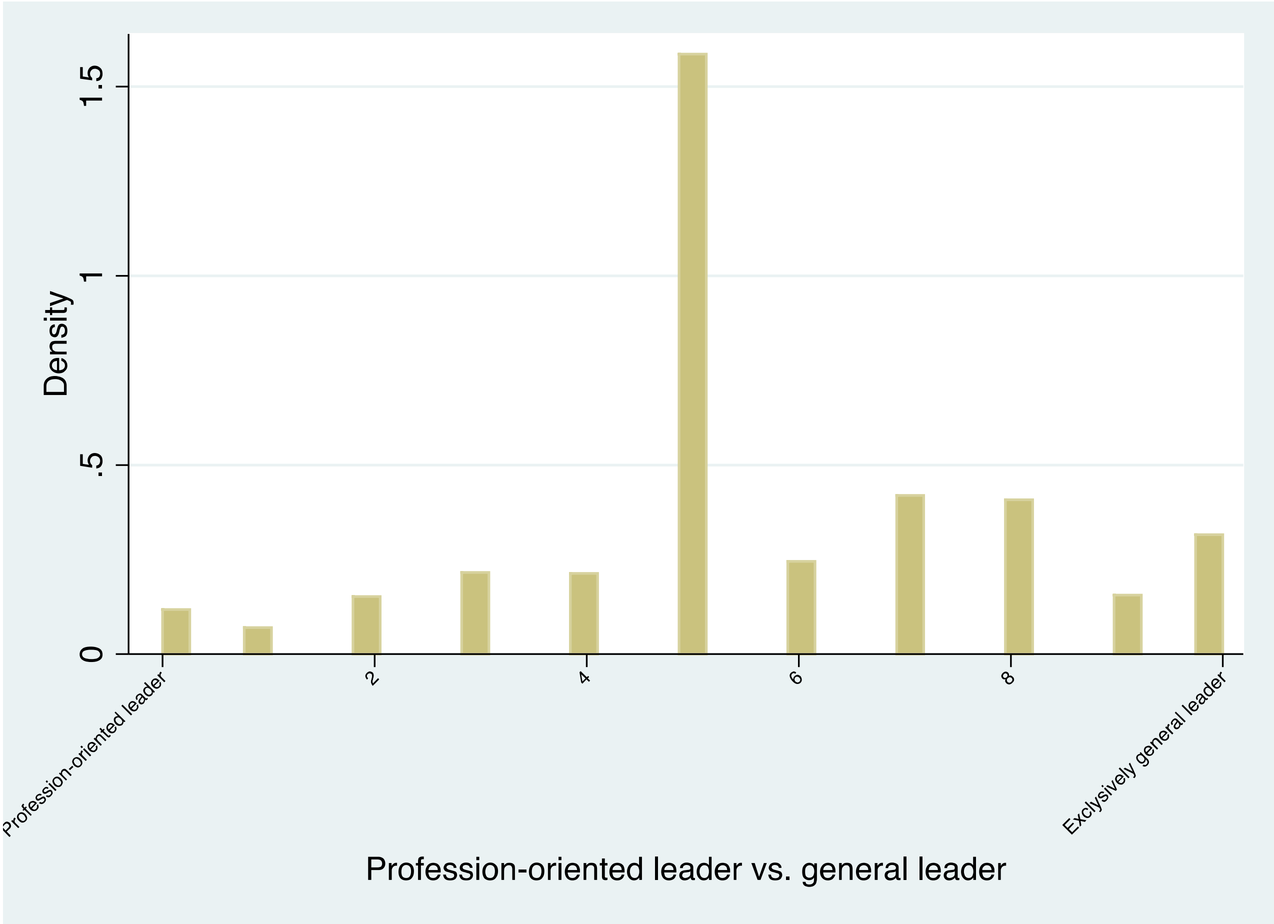
Note: *e.g teacher/*lærer*

Figure 28. The ethical identity-dilemma, leaders – distribution

Note: N=805, mean = 7.77, std.dev =1.76, min = 0, max = 10.

With a mean of 7.77 the distribution indicates that most of the leaders consider their identity as general leader more important than their trade-profession identity.

Figure 29. The ethical identity-dilemma, employees – distribution



Note: N=9454, mean = 5.65, std.dev. = 2.23, min = 0, max = 10

Many of the employees indicate that they perceive their leader as a trade-professional leader just as much as a general leader. The distribution could also reflect that many of the employees do not view this as a leader dilemma.

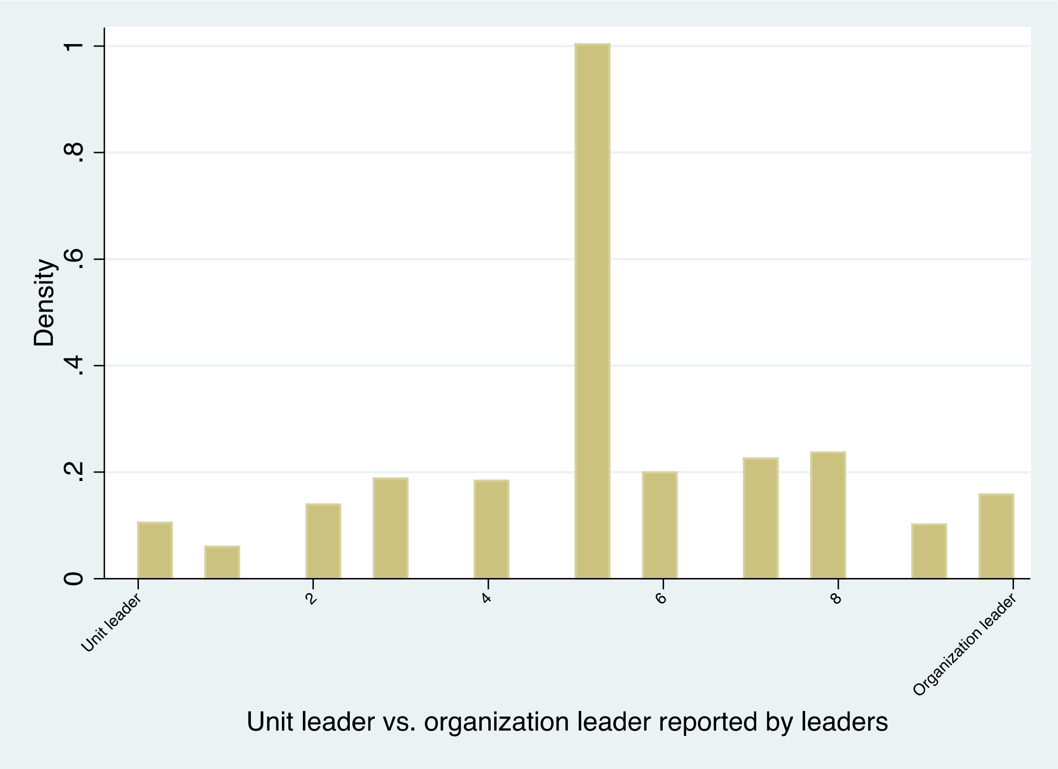
The Moral Identity-Dilemma

Table 26. The moral identity-dilemma

	Leaders	Source
l_lih	On a scale from 0-10, how would you assess your identity as [organization type] leader* in relation to your identity as [administrative area] leader**? (0 was worded = “my identity as a [organization type] is clearly most important”, 10 was worded= “my identity as [administrative-area] leader is clearly most important”) *På en skala fra 0-10, hvordan vil du da vurdere din identitet som [organisationstype]leder* i forhold til din identitet som [forvaltningsområde]leder** (0 lød = ”Min identitet som [organisationstype]leder er klart vigtigst”, 10 lød = ”Minidentitet som [forvaltningsområde]leder er klart vigtigst*	Own
	Employees	
Lih	On a scale from 0-10, how would you assess your identity as [organization type] leader* in relation to your identity as [administrative area] leader**? (0 was worded = “my identity as a [organization type leader] is clearly most important”, 10 was worded= “my identity as a [administrative area] leader is clearly most important”) *På en skala fra 0-10, hvordan vil du da vurdere din identitet som [organisationstype]leder* i forhold til din identitet som [forvaltningsområde]leder** (0 lød = ”Min identitet som [organisationstype]leder er klart vigtigst”, 10 lød = ”Minidentitet som [forvaltningsområde]leder er klart vigtigst*	Own

Note: *e.g. school principal/skoleleder, **municipal leader/kommunal leder

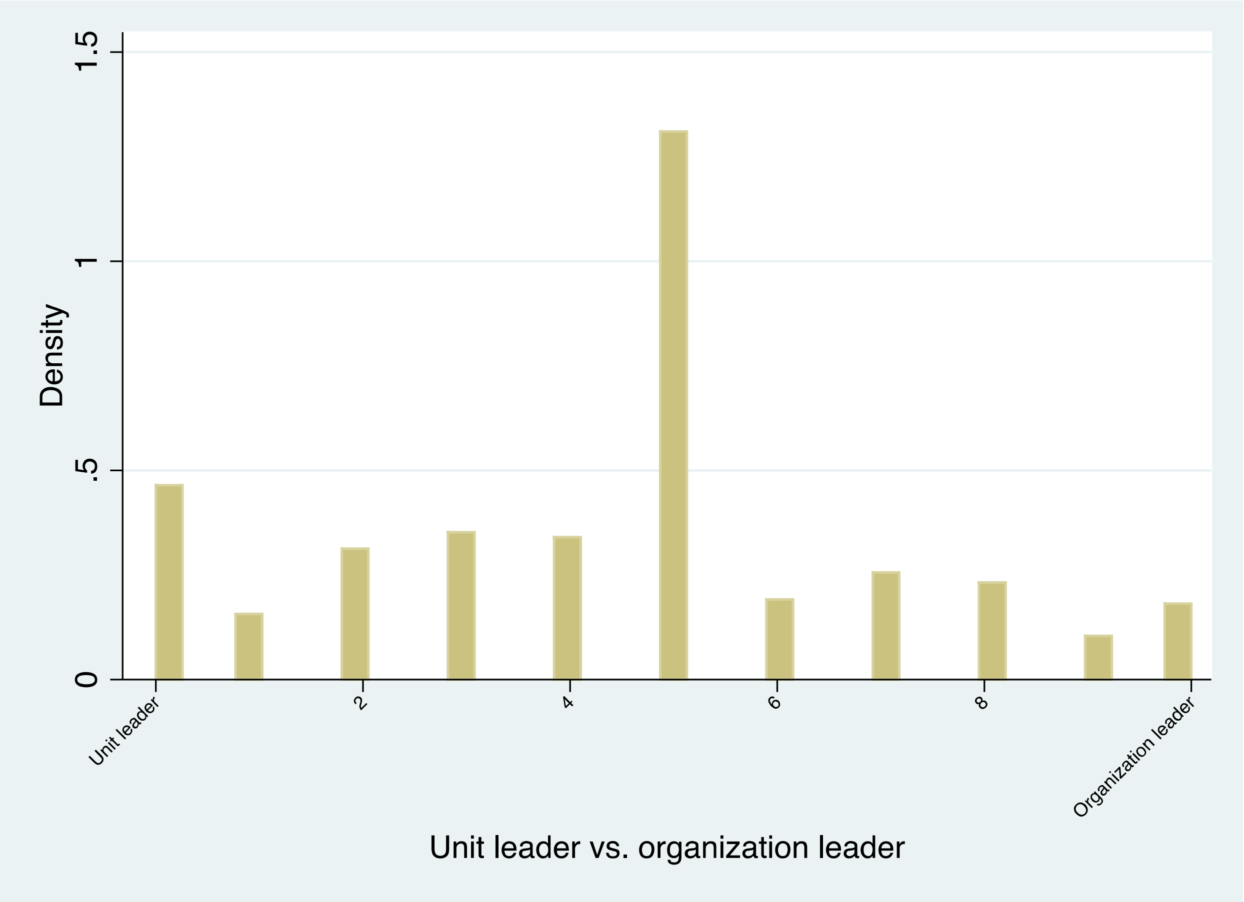
Figure 30. The moral identity-dilemma, leaders – distribution



Note: N=692, mean=5.31, std.dev = 2.35, min = 0, max = 10

Many of the leaders indicate that their identity as a unit leader is equally important compared to their identity as an administration-area leader. The distribution could also reflect that the leaders do not experience this type of identity-dilemma.

Figure 31. The moral identity-dilemma, employees – distribution



Note: N=8591, mean = 4.43, std.dev = 2.62, min = 0, max = 10

Many of the employees indicate that they perceive their leader as a unit leader just as much as a administration-area leader. The distribution could also reflect that many of the employees do not view this as a leader dilemma.

Chain-of-command cross-pressure – experienced

Table 27. Chain-of-command cross-pressure – experienced

	Leaders	Source
l_lkg	On a scale from 0-10, how often do you experience having to handle irreconcilable interests from your employees and your superiors? (0 was worded = “never”, 10 was worded = “constantly”) *På en skala fra 0-10, hvor ofte oplever du at skulle håndtere uforenelige interesser fra dine medarbejdere og dine overordnede? (0 lød = ”aldrig”, 10 lød = ”konstant”).*	Own

Figure 32. Chain-of-command cross-pressure – experienced, distribution

Note: N= 804, mean=4.58 , std.dev = 2.56, min = 0, max = 10

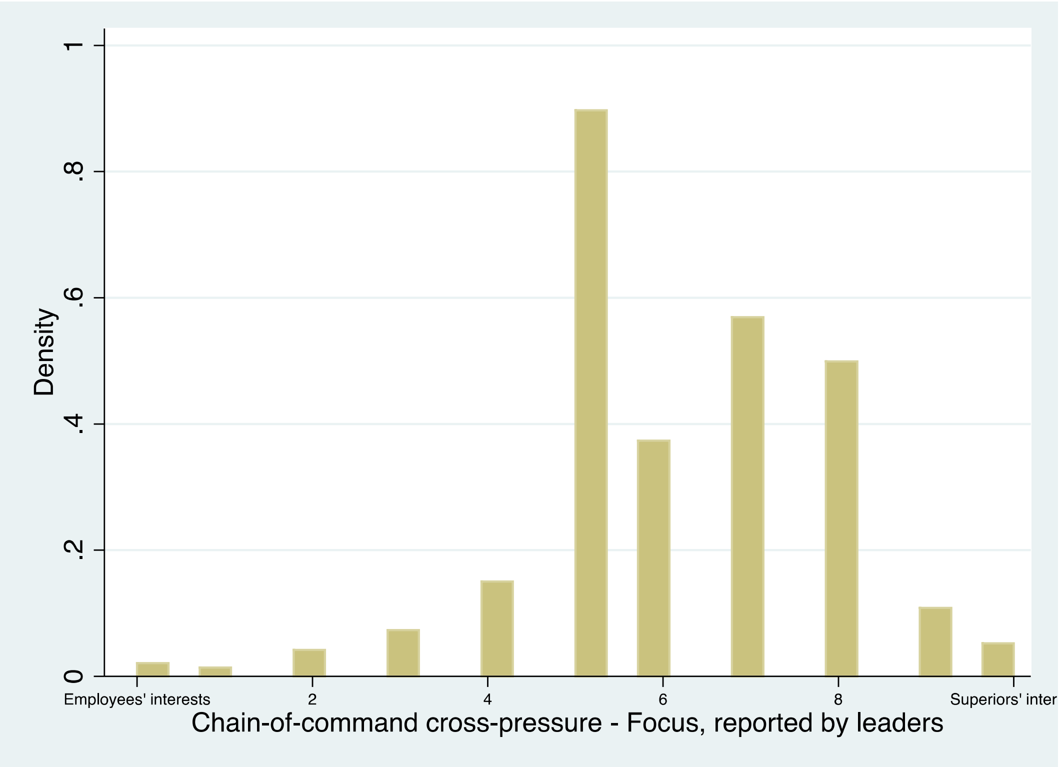
The responses are normally distributed with a mean of 4.58, indicating that the leaders do to a varying degree experience cross-pressure from the position in the middle of the chain-of-command

Chain-of-command cross-pressure – focus

Table 28. Chain-of-command cross-pressure – focus

	Leaders	Source
l_lkk	*Even though we know that leadership depends on specific situations, we ask you to describe, on a scale from 0-10, how you typically react in situations where you have to handle irreconcilable interests from your employees and your superiors (0 was worded = "I primarily focus on handling my employees' interests", 10 was worded = "I primarily focus on handling the my superiors' interests")* *Selvom vi ved, at ledelse afhænger af den konkrete situation, vil vi alligevel bede dig give det typiske billede af, hvordan du håndtere uforenelige interesser fra dine medarbejdere og dine overordnede. (0 lød = "Jeg fokuserer primært på varetagelsen af minde medarbejderes interesser", 10 lød = "jeg fokuserer primært på varetagelsen af mine overordnedes interesser".*	Own

Figure 33. Chain-of-command cross-pressure – focus, distribution



Note: N=802, mean=6.11 , std.dev = 1.72, min = 0, max = 10

Many leaders indicate equal handling of employee interests and superior interest. However, more leaders indicate handling (to a more or less degree) superior interests than leaders indicating handling employee interests.

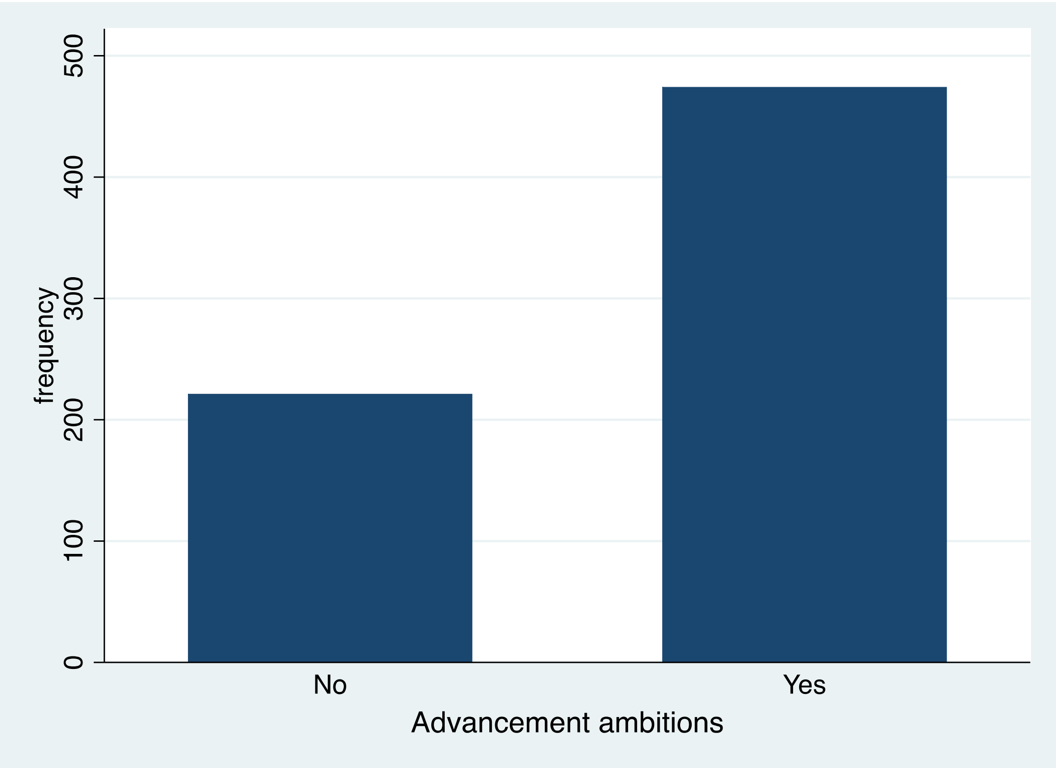
Advancement Ambitions (LLB)

Self-interested employees might also have utility maximize through carrier-advancement. We therefore also asked leaders about their carrier advancement wish. The question was formulated as a yes/no question.

Table 29. Advancement ambitions, item

	Leaders	Source
l_lpr	Would you at one point like to advance in your career as a leader? *Kunne du på et tidspunkt tænke dig at avancere karrieremæssigt som leder?*	Own

Figure 34. Advancement ambitions, distribution



Note: N = 695

Performance Based Pay (LLB)

The New Public Management scheme assumes that public employees are self-interested individuals who can be steered through monetary incentives such as Performance based pay. The argument is that introducing performance based pay to employees will raise performance, because this will make employees focused on reaching performance goals in order to maximizing their personal utility (Miller, 2005; Prendergast, 1999).

We measured leaders performance based pay on a continuous scale. The statistical descriptions includes answers from leaders from all five participating LEAP-sectors (the primary and secondary school sector, the daycare sector, tax sector and bank sector).

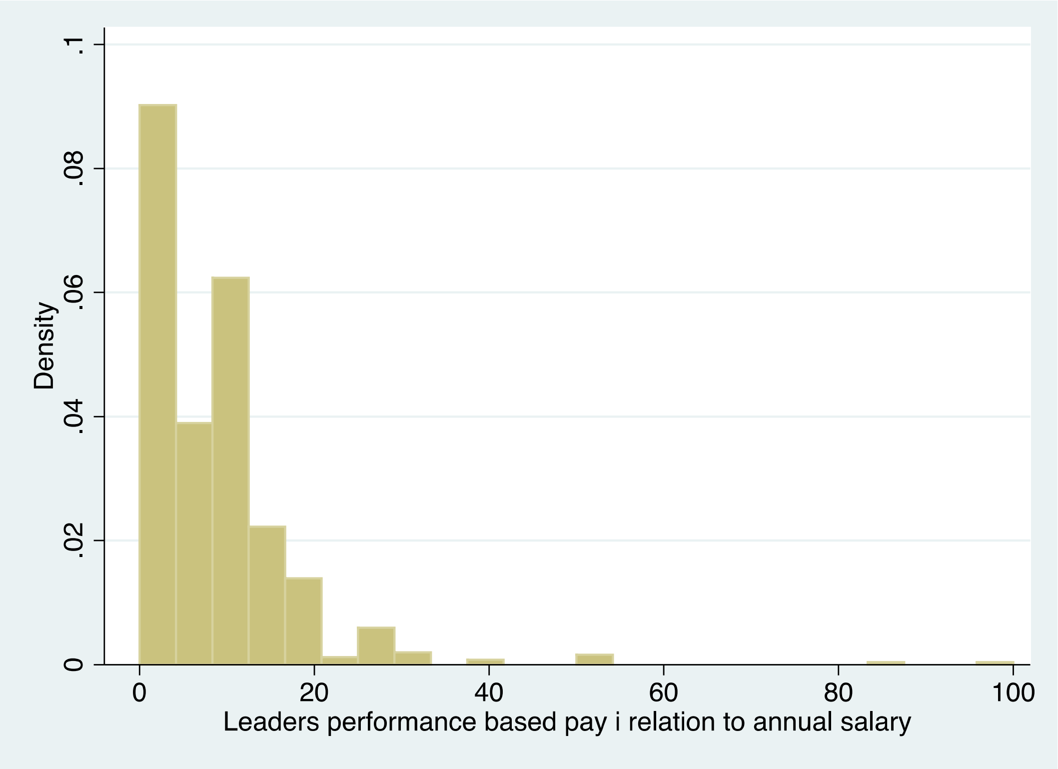
Percentage

Table 30. Performance based pay - percentage, item

	Leaders	Source
l_rlp	If you have the opportunity to receive performance based pay or other types of supplements contingent on a specific effort (not function- or qualification supplements)*, how much would this supplement maximum correspond to in relation to your annual salary (percentages)? *Hvis du har mulighed for at modtage resultatløn eller andre former for tillæg knyttet til en specifik indsats (dvs. ikke funktions- eller kvalifikationstillæg), hvor meget vil dette tillæg maksimalt svare til i forhold til din årsløn (angiv i procent)*	Own

*In Denmark these are trade-union agreed general supplements

Figure 35. Performance based pay - percentage, distribution



Note: n = 604, mean =8.11, std. dev. = 9.32, min = 0, max =100

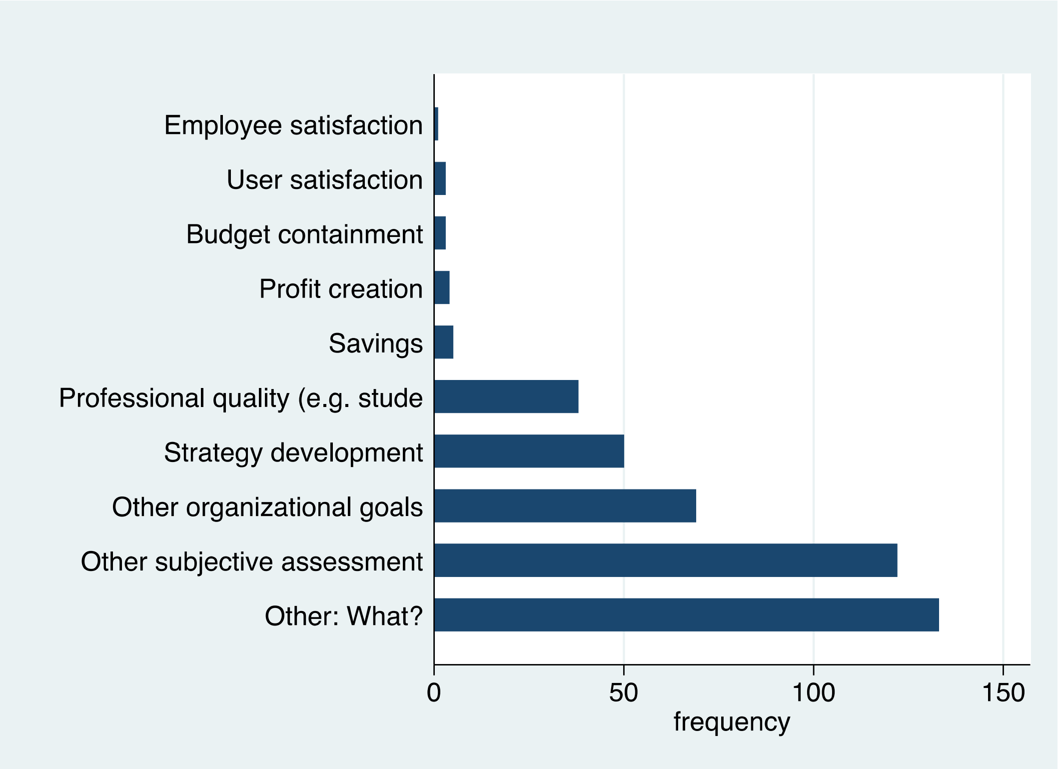
The distribution shows a considerable amount of the leaders who do not have the opportunity to receive performance based pay or other types of supplements contingent on specific effort, given the peak on 0 %. The minority of leaders that *do* receive performance based pay or other type of supplements receives around 5-20% of their annual salary.

Criteria

Table 31. Performance based pay - criteria, item

	Leaders	Source
l_rlk1-l_rlk10	Which criterions trigger the performance based pay or supplement (you can mark more than one criterion)? (possible criterions were: employee satisfaction, user satisfaction, budget containment, profit creation, savings, professional quality (e.g. student grades, completion) , strategy development, other organizational goals, other subjective assessment, other: what? *Hvilke kriterier relaterer udløsningen af resultatlønnen eller tillægget sig til (sæt gerne flere kryds)?(mulige svar: medarbejdertilfredshed, brugertilfredshed, budgetoverholdelse, profitskabelse, besparelser, faglig kvalitet(eks. Elevkarakter, gennemførelse el. lign.), strategiudvikling, andre organisatoriske mål, anden subjektiv vurdering, andet: hvilket?*	Own

Figure 36. Performance based pay - criteria, distribution



The distribution suggests that many of the leaders receiving performance-based pay are measured on subjective criterions or other criterions. Only few leaders are measured on the satisfaction of the users and employees, budget containment or profit creation.

Formal Performance Management Systems (PAN)

Performance management refers to the practice of setting organizational goals and targets, measuring organizational performance, and producing feedback information on organizational performance. This battery focuses on formal systems and practices related to setting goals, measuring performance, and evaluating performance data. The items included here are based on Andersen (2008), and concern both practices within the organization and demands to the organization from above.

Table 32. Formal performance management systems, items

		Source
l_fpm1	In my [organization] we have defined precise, written goals for our particular [organization's] results. *I min [organisation] har vi opstillet præcise skriftlige målsætninger for netop vores [organisations] resultater*	Andersen (2008)
l_fpm2	Written evaluations are conducted of my [organization's] achieved results *Der foretages skriftlige evalueringer om min [organisations] opnåede resultater*	Andersen (2008)
l_fpm3	My superiors have defined clear goals regarding the results my [organization] has to achieve *Mine overordnede har opstillet klare mål for, hvilke resultater min [organisation] skal opnå*	Own
l_fpm4	My [organization] is instructed to from above make written evaluations of our goal achievement *Min [organisation] er pålagt ovenfra at lave skriftlige evalueringer af vores målopfyldelse*	Own

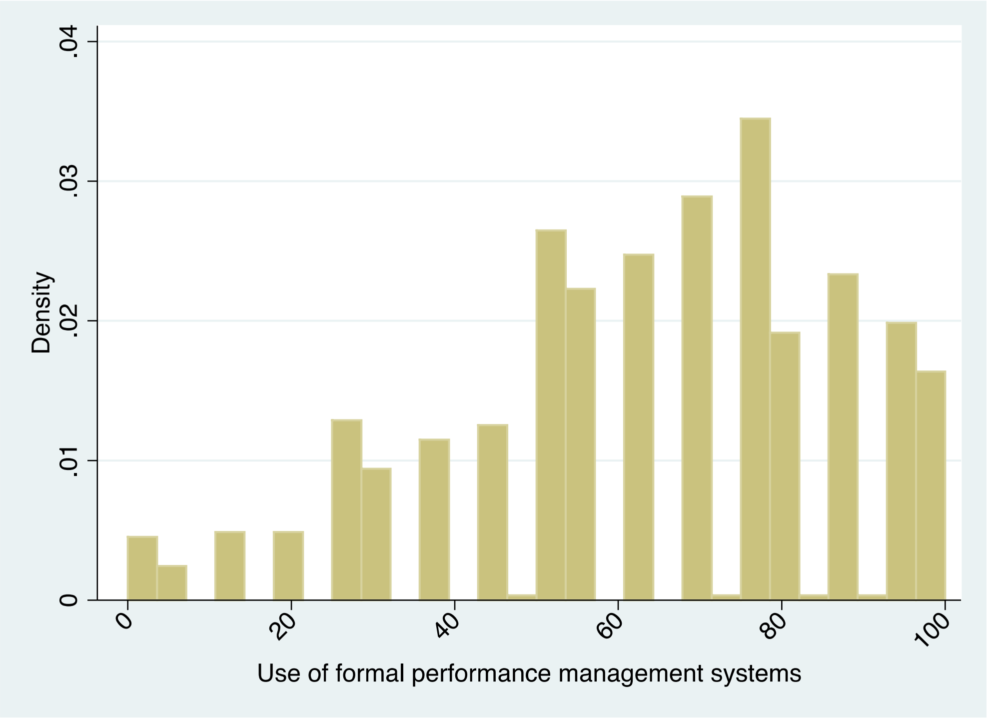
Table 33. Factor analysis: Formal performance management systems

	Loadings
In my [organization] we have defined precise, written goals for our particular [organization's] results.	.648
Written evaluations are conducted of my [organizations] achieved results	.788
My superiors have defined clear goals regarding the results my [organization] has to achieve	.617
My [organization] is instructed to from above make written evaluations of our goal achievement	.765

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 798. Cronbach's alpha = .812

A factor analysis shows that the 4 items load reasonably well on a single dimension, indicating that "formal performance management systems describes" a coherent organizational practice. The distribution of the index is slightly left-skewed and shows that a majority of organizations report to use formal performance management systems.

Figure 37. Formal performance management systems, distribution



Note: N=804, mean = 63.07, std. dev. = 24.03, min = 0, max = 100

Performance Information Use (PAN)

Use of performance information for decision-making has been used as a behavioral measure to operationalize actual implementation of performance management systems. The survey includes three items that are all taken from Moynihan and Hawes (2012). The three items inquire about the use of performance information for decision-making regarding, respectively, personnel, resource allocation, and learning.

Table 34. Performance information use, items

	Leaders	Source
Pretext	Many managers in the public sector receive information about their organization's results. To what extent do you use this information to … *Mange ledere modtager information om deres organisations resultater. I hvor høj grad bruger du denne type information til at…*	Moynihan and Hawes (2012)
l_piu1	Make personnel decisions? *Træffe personalemæssige beslutninger?*	Moynihan and Hawes (2012
l_piu2	Make decisions about ressource allocation *Træffe beslutninger om fordelingen af vores ressourcer*	Moynihan and Hawes (2012
l_piu3	Learn how to improve our work? *Lære, hvordan vi kan forbedre vores arbejde?*	Moynihan and Hawes (2012

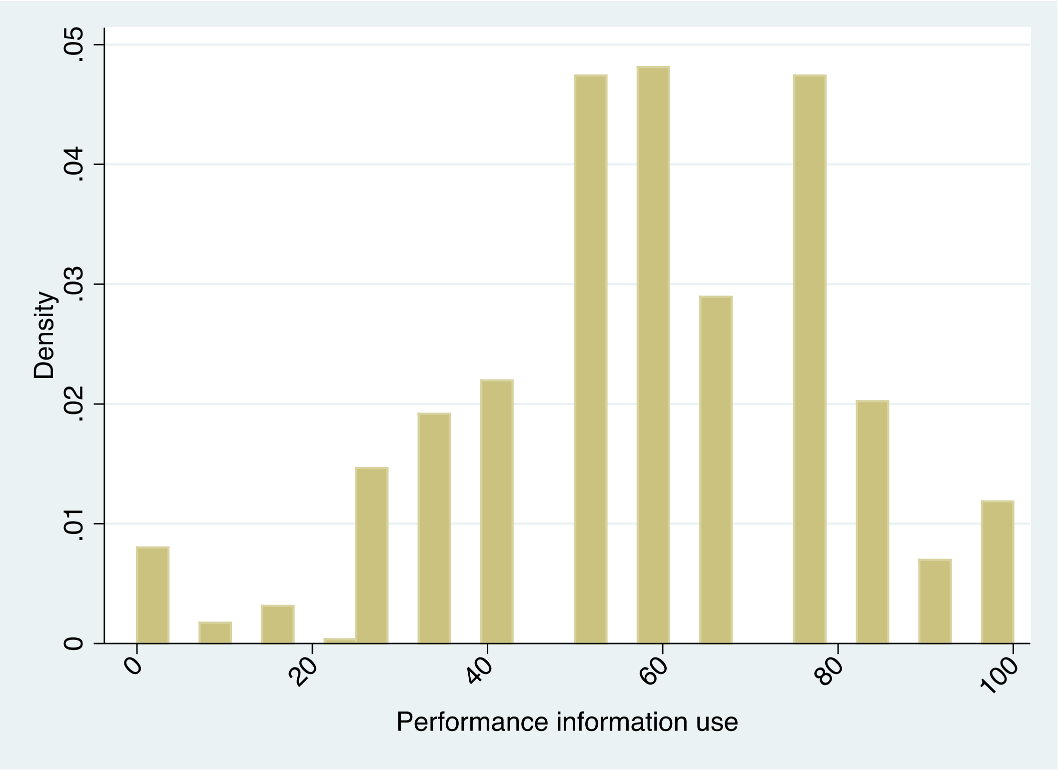
A factor analysis shows that the 3 items load reasonably well on a single dimension, indicating that they describe a coherent decision practice of using performance data.

Table 35. Factor analysis: Performance information use

	Loadings
Make personnel decisions?	.804
Make decisions about ressource allocation	.814
Learn how to improve our work?	.617

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 800. Cronbach's alpha = .814

Figure 38. Performance information use, distribution



Note: N=803, mean = 57.75 std. dev. = 21.66, min = 0, max = 100

The index is almost normally distributed and shows considerable variation in the reported use of performance information.

Managerial Tasks (UTJ)

The portfolio of managerial tasks is comprehensive for public and private leaders. In order to map out which tasks leaders take on, each leader is asked to assess whether she has responsibility for and/or manages a number of tasks related to internal components of their organization such as organizing and staffing (Rainey 2014). Managerial tasks define channels through which leaders influence their employees and it is therefore important to know which tasks the leaders engage in their organization. It is also helps us to disentangle the division of labor in the daycare sector, where we survey both lower and higher rank leaders within the same organization.

Table 36. Managerial tasks, items and descriptive statistics

	It is my responsibility that the task is completed *Jeg har ansvar for, at opgaven bliver løftet*			I perform the task myself *Jeg udfører opgaven*			
	Yes	No	N	Yes, for all employees	Yes, for some employees	No	N
Career development interview *MUS samtaler*	97.68	2.32	561	66.55	30.94	2.56	585
Wage bargaining *Lønsamtaler*	81.77	18.23	554	65.73	18.18	16.08	572
Sickness absence interview *Sygefraværssamtaler*	96.59	3.41	558	69.23	28.89	1.88	585
Professional development *Ansvar for faglig udvikling*	98.62	1.38	579	63.52	28.83	7.65	562
Daily professional management *Ansvar for den daglige faglige ledelse*	96.50	3.50	571	59.43	28.55	12.03	557
Hire employees *Hyre medarbejdere*	86.73	13.27	565	61.61	28.97	9.42	573
Fire employees *Fyre medarbejdere*	86.38	13.62	558	74.57	14.01	11.42	578
Strategic management *Strategisk ledelse*	88.75	11.25	560	81.55	12.59	5.86	580
Planning work activites *Arbejdstilrettelæggelse*	92.13	7.87	572	49.39	30.89	19.72	573
Budget responsibility *Budgetansvar*	79.04	20.96	563	68.25	8.25	23.51	570
Economic priorities *Økonomiske prioriteringer*	80.00	20.00	565	67.13	14.34	18.53	572

MLQ (CBJ)

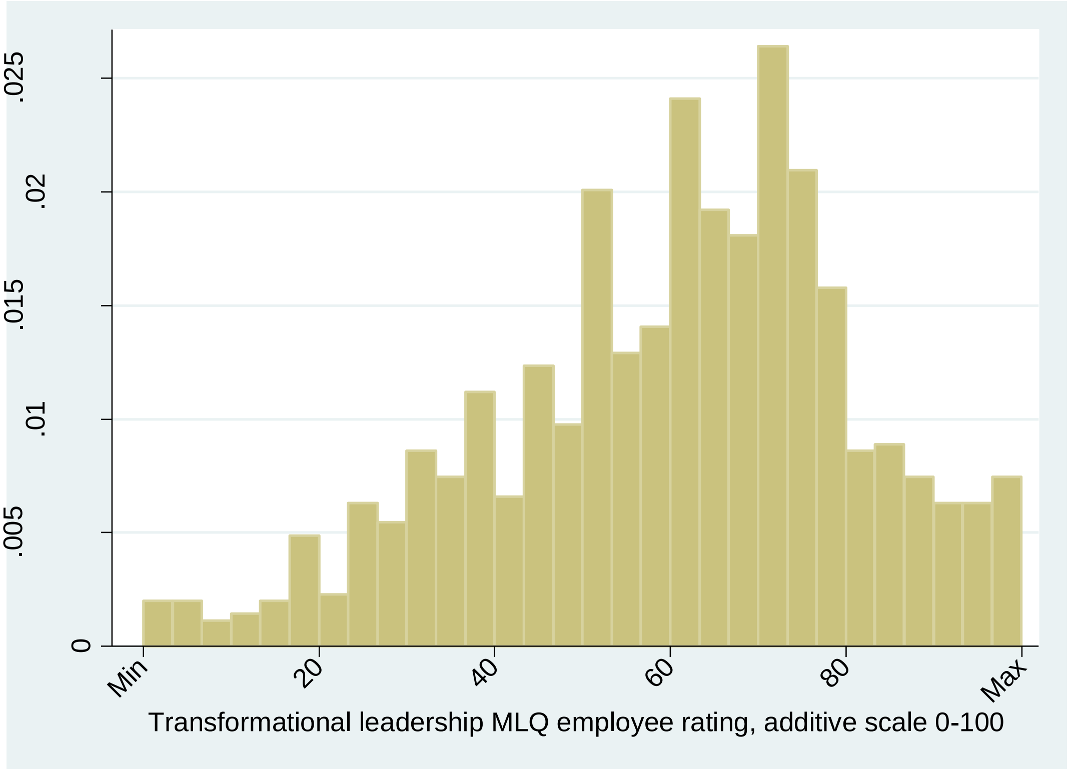
The Multifactor Leadership Questionnaire (MLQ) is the predominant instrument for measuring the full range leadership model developed by Bernard Bass, Bruce Avolio and colleagues. In the model, transformational leadership comprises of four components: idealized influence, intellectual stimulation, individualized consideration, and inspirational motivation. Transactional leadership comprises of three components: contingent reward and passive and active management by exception. The survey instrument has been employed across a large number of contexts such as various sectors and countries. The survey questions are copyrighted and we therefore restrict our report to detail the factor loadings for items measuring transformational leadership and transactional leadership, respectively.

Table 36a Factor analysis: Transformational leadership based on MLQ, employee reports

Pretext: My leader …	Factors			
	1	2	3	4
MLQ1	.804			
MLQ2	.652			
MLQ3	.843			
MLQ4	.706			
MLQ5	.707			
MLQ6	.663			
MLQ7	.783			
MLQ8	.716			
MLQ9	.642	.463		
MLQ10	.660	.462		
MLQ11	.749			
MLQ12	.727	.320		
MLQ13	.767			
MLQ14	.799			
MLQ15	.786			
MLQ16	.686		.365	
MLQ17	.780		.308	
MLQ18	.706			-.384
MLQ19	.743			-.373
MLQ20	.775		.323	

Note: Extraction method: Principal factor analysis with oblimin rotation. Loadings < .3 left blank. Reversed: Code is reversed. One factor with an Eigenvalue higher than 1 was extracted. N = 915. Cronbach's alpha for items in factor 1 = .96.

Figure 38a Distribution of transformational leadership (factor 1) as reported by employees



Note: N = 1046, mean = 60.13, std. dev. = 20.78, min = 0, max = 100

For transformational leadership based on the MLQ, we see that respondents cannot distinguish between the items. Based on the conceptualization, we would expect to extract four factors corresponding to each of the four components, but all items essentially load on the same latent dimension. The alpha is very high which is not surprising given the large number of items included. The distribution for a scale based on the first factor approaches a normal distribution.

Table 36b. Factor analysis: Transactional leadership based on MLQ, employee reports

Pretext: My leader …	Factors	
	1	2
MLQ1		.733
MLQ2	.406	.380
MLQ3	.302	.557
MLQ4		.741
MLQ5	.770	
MLQ6	.445	.391
MLQ7	.752	
MLQ8	.726	

Note: Extraction method: Principal factor analysis with oblimin rotation. Loadings < .3 left blank. Two factors with an Eigenvalue higher than 1 were extracted. N = 918.

For transactional leadership based on the MLQ, we see multiple cross loadings suggesting that the items do not discriminate very well. For this reason, it is problematic to generate two scales reflecting contingent reward and management by exception, respectively. As an alternative, one could drop items that cross loads and generate two separate scales with less information or create a one-dimensional construct based on the factor that explains the most variance in data (factor 1).

Leadership Domain Identification (ALH)

[TO BE ADDED]

Strategy Focus (CBJ)

[TO BE ADDED]

Table 37. Strategy focus, items

		Source
l_strategy1	We seek to be first to identify new modes of delivery *Vi forsøger at være først til at identificere nye måder at gøre tingene på*	Boyne et al. 2009b, Hansen 2011
l_strategy2	Searching for new opportunities is a major part of our overall strategy *At søge efter nye muligheder er en væsentlig del af vores overordnede strategi*	Boyne et al. 2009b, Hansen 2011
l_strategy3	We often change our focus to new areas of service provision *Vi skifter ofte vores fokus til nye aktivitetsområder*	Boyne et al. 2009b, Hansen 2011
l_strategy4	We seek to maintain stable service priorities *Vi forsøger at opretholde en stabil prioritering mellem vores aktiviteter*	Boyne et al. 2009b, Hansen 2011
l_strategy5	We focus on our core activities *Vi fokuserer kun på vores kerneaktiviteter*	Boyne et al. 2009b, Hansen 2011
l_strategy6	We change provision only when under pressure from external agencies *Vi ændrer kun måderne at gøre tingene på, når vi er under pres udefra*	Boyne et al. 2009b, Hansen 2011
l_strategy7	We give little attention to new opportunities for service delivery *Vi har ikke særligt stort fokus på muligheder for nye aktiviteter*	Boyne et al. 2009b, Hansen 2011
l_strategy8	The service explores new opportunities only when under pressure from external agencies *Vi udforsker kun nye muligheder, når vi er under pres udefra*	Boyne et al. 2009b, Hansen 2011

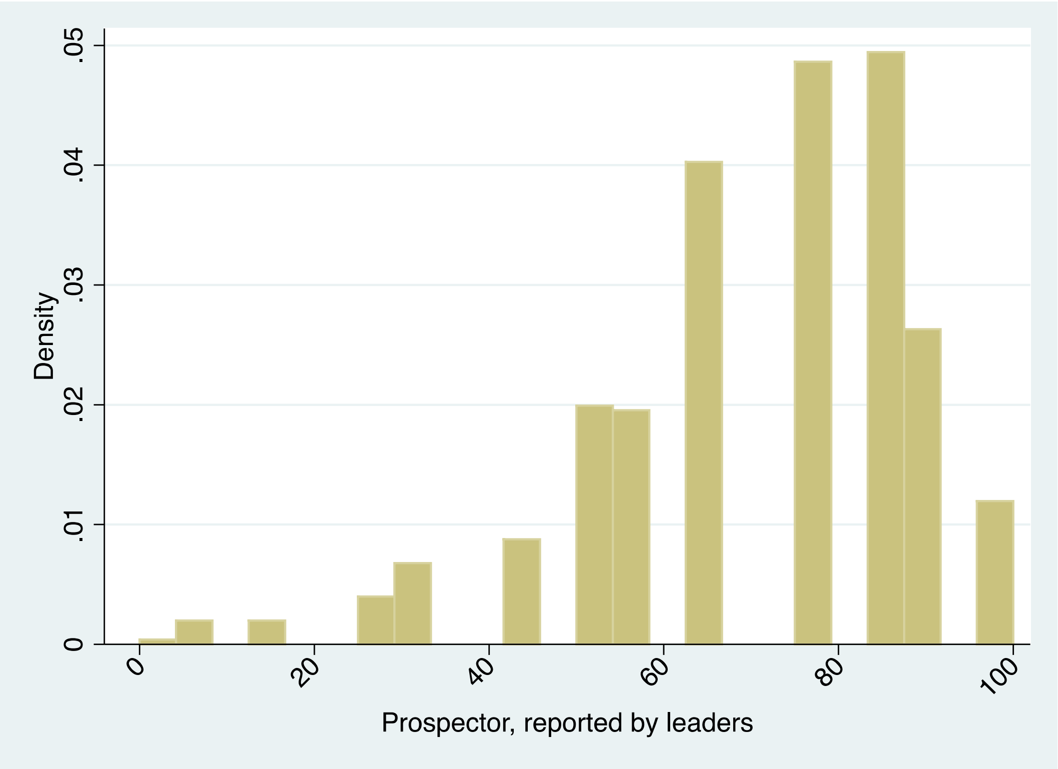
Table 38. Factor analysis: Strategy focus

	Factor 1	Factor 2
We seek to be first to identify new modes of delivery		.539
Searching for new opportunities is a major part of our overall strategy		.538
We often change our focus to new areas of service provision		
We seek to maintain stable service priorities		
We focus on our core activities	.312	
We change provision only when under pressure from external agencies	.682	
We give little attention to new opportunities for service delivery	.458	-.328
The service explores new opportunities only when under pressure from external agencies	.648	

Note: Extraction method: principal factor analysis with oblimin rotation. Loadings < .3 left blank. One factors with an Eigenvalue higher than 1 and one factor with eigenvalue 0,790 was extracted. N = 591 Cronbach's alpha for items in factor 1 = .669. Cronbach's alpha for items in factor 2 = .586.

The loadings of the items are fairly weak, especially for factor 2 that (should) tap the "prospector"-dimension. The first two items reach a threshold of 0.3, and are included in the scale for strategy focus, prospector. The first factor taps the "reactor"-dimension, and three out of the four items are included in the scale, leaving out "We focus on our core activities"

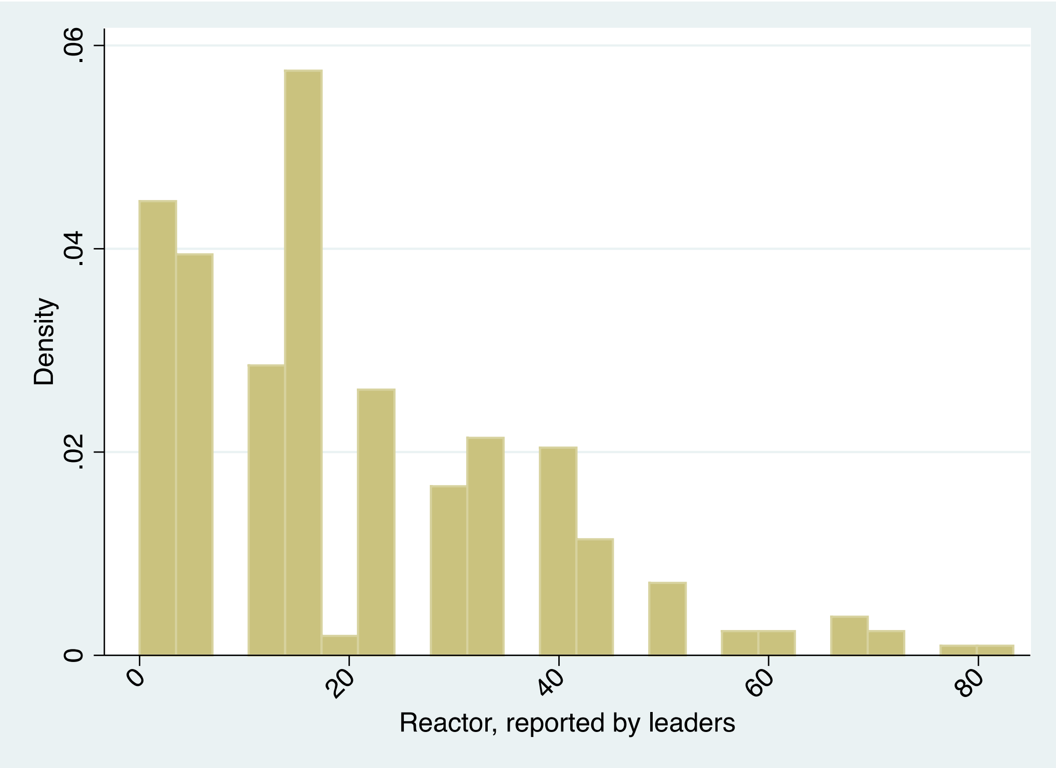
Figure 39. Strategy focus - prospector, distribution



n=602, mean = 70.57 std. dev. = 18.67, min = 0, max = 100. NB: No replace with means because of only two items.

The distribution is highly left-skewed indicating that leaders in general perceive themselves as prospectors (mean = 70.57). The alpha reliability score is not satisfactorily (.59)

Figure 40. Strategy focus - reactor, distribution



Note: n=606, mean = 20.13 std. dev. = 17.01, min = 0, max = 83.33

The distribution is highly right-skewed indicating that leaders in general only perceive that they are reactors to a lesser degree (mean = 20.13). The alpha reliability score is satisfactorily (.67)

Organizational Self-Esteem (ALH)

[TO BE ADDED]

Self-Efficacy (ALH)

[TO BE ADDED]

Public Service Motivation (LLB)

Improving performance in the public sector is central for the Public Administration discipline (Rainey 1997, Boyne 2003, Hondeghem and Perry 2009, Nasi 2011). The question of how to motivate purposeful action and performance in public organizations is thus highly salient (Wright et al. 2012). In public administration, much attention has been given to the concept of Public service motivation (PSM) as an especially important antecedent of performance (Brewer 2008, Perry et al 2010, Bellé 2013). Public service motivation is defined as “the desire to help others and society through delivering public service” (Hondeghem & Perry 2009), and is thus argued to be mainly grounded in the task of public service provision (Perry et al 2010).

There is an increasing acknowledgement in the literature that PSM is an overarching formative construct made up by four dimensions of reflexive indicators (Coursey et al. 2008, Kim 2011). PSM is therefore measured on as a four dimension construct (attraction to public policy, self-sacrifice, compassion and commitment to the public interest). Items are based on international scales (Perry 1996, Kim et al 2012) modified and tested in the Danish context (Andersen et al 2011, Jacobsen et al 2013). All items were measured using likert format questions ranging from totally disagree to totally agree. The statistical descriptions includes answers from all five participating LEAP-sectors (the primary and lower secondary school sector, the upper secondary school sector, the daycare sector, tax sector and bank sector)

Table 39. Items measuring public service motivation

	Self-sacrifice	**Source(s)**
psm_ss1	I believe in putting duty before self *Jeg sætter samfundsmæssige forpligtigelser over hensynet til mig selv*	Perry 1996 (PSM 5) Kim et al 2012 (SS3) Jacobsen et al 2013
psm_ss2	I am not afraid to go to bat for the rights of others even if it means I will be ridiculed *Jeg er ikke bange for at forsvare andres rettigheder, selvom det betyder, at jeg bliver gjort til grin*	Perry 1996 (PSM 38)
psm_ss3	Making a difference in society means more to me than personal achievements *Det er vigtigere for mig at gøre en forskel i forhold til samfundet end at opnå personlig vinding*	Perry 1996 (PSM 1) Kim et al 2012 (SS1) Jacobsen et al 2013
psm_ss4	I feel people should give back to society more than they get from it *Jeg mener, at man skal bidrage med mere til samfundet, end man modtager*	Perry 1996 (PSM 17) Kim et al 2012 (SS5) Jacobsen et al 2013
psm_ss5	I am willing to risk personal loss to help society *Jeg er villig til at risikere at skulle tilsidesætte mine personlige behov for samfundets skyld*	Kim et al 2012 (SS4) Jacobsen et al 2013
psm_ss6	I am prepared to make sacrifices for the good of society *Jeg er klar til at lide afsavn for samfundets skyld*	Modified from Perry 1996 (PSM 26) Jacobsen et al 2013
	Compassion	
psm_com1	It is difficult for me to contain my feelings when I see people in distress *Jeg bliver følelsesmæssigt berørt, når jeg ser mennesker i nød*	Perry 1996 (PSM 4) Kim et al 2012 (COM1) Jacobsen et al 2013 Andersen et al 2011
psm_com2	For me, considering the welfare of others is one of the most important values *For mig er hensynstagen til andres velfærd meget*	Modified from Perry 1996 (PSM8) Jacobsen et al 2013

	vigtig	Andersen et al 2011
psm_com3	I get very upset when I see other people being treated unfairly *Jeg bliver meget berørt, når jeg ser andre mennesker blive behandlet uretfærdigt*	Kim et al 2012 (COM 5) Jacobsen et al 2013
psm_com4	I feel sympathetic to the plight of the underprivileged *Jeg føler sympati overfor mindre privilegeredes mennesker med problemer*	Kim et al 2012 (COM 2) Jacobsen et al 2013
psm_com5	I am often reminded by daily events about how dependent we are on one another (PSM 13) *Daglige begivenheder mindre mig ofte om, hvor afhængige vi er af hinanden*	Perry 1996 (PSM 13) Andersen et al 2011
	Commitment to the public interest	
psm_cpi1	It is important to me to contribute to the common good *Det er vigtigt for mig at bidrage til det fælles bedste*	Kim et al 2012 (CPI 12) Jacobsen et al 2013
psm_cpi2	I consider public service my civic duty *Det er min borgerpligt at gøre noget, der tjener samfundets bedste*	Perry 1996 (PSM 39) Jacobsen et al 2013 Andersen et al 2011
psm_cpi3	It is important to me that public services contributes to the common good *Det er vigtigt for mig, at offentlige ydelser gavner samfundet som helhed*	Jacobsen et al 2013
psm_cpi4	Meaningful public service is very important to me *Det er vigtigt for mig, at de offentlige ydelser er i orden*	Perry 1996 (PSM 30) Andersen et al 2011
psm_cpi5	I would prefer seeing public officials do what is best for the whole community even if it harmed my interests *Jeg ser helst, at offentlige ansatte gør det, der er bedst for hele samfundet, selvom det skulle gå ud over mine egne interesser*	Perry 1996 (PSM 34) Kim et al 2012 (CPI13) Jacobsen et al 2013 Andersen et al 2011
	Attraction to public policy	

psm_atp1	I generally associate politics with something positive *Jeg forbinder generelt politik med noget positivt*	Jacobsen et al 2013 Andersen et al 2011
psm_atp2	The give and take of public policy making doesn't appeal to me (reversed) *Jeg bryder mig ikke om det politiske spil*	Perry 1996 (PSM 27) Modified from Jacobsen et al 2013 and Andersen et al 2011
psm_atp3	I don't care much for politicians (reversed) *Jeg har ikke særligt høje tanker om politikere*	Perry 1996 (PSM 31) Jacobsen et al 2013 Andersen et al 2011

Table 40. Factor loadings: Public service motivation

		Factors			
		1	2	3	4
Self-sacrifice	I believe in putting duty before self.		.694		
	I am not afraid to go to bat for the rights of others even if it means I will be ridiculed				
	Making a difference in society means more to me than personal achievements.		.605		
	I feel people should give more back to society than they get from it.		.521		
	I am willing to risk personal loss to help society.		.754		
	I am prepared to make sacrifices for the good of society.		.733		
Compassion	It is difficult for me to contain my feelings when I see people in distress.	.759			
	For me, considering the welfare of others is one of the most important values.	.678			
	I get very upset when I see other people being treated unfairly.	.753			
	I feel sympathetic to the plight of the underprivileged.	.722			
	I am often reminded by daily events about how dependent we are on one another	.521			
Attraction to public policy	I generally associate politics with something positive.				-.648
	The give and take of public policy making doesn’t appeal to me (reversed).				.665
	I do not care much for politicians (reversed)				.727
Commitment to the public interest	It is important for me to contribute to the common good.	.371		.576	
	I consider public service my civic duty.		.307	.560	
	It is important for me that public services contribute to the common good.			.574	
	Meaningful public service is very important to me	.333		.544	
	I would prefer seeing public officials do what is best for the whole community, even if it harmed my interests.		.380	.408	

Note: Extraction method: Principal factor analysis with oblimin rotation. Loadings < .3 left blank. Reversed: Code is reversed. Four factors with an Eigenvalue higher than 1 was extracted. N = 8786. Cronbach’s alpha for items in factor 1 = .791. Cronbach’s alpha for items in factor 2 = .834. Cronbach’s alpha for items in factor 3 = .759. Cronbach’s alpha for items in factor 4 = .771. Cronbach’s alpha for all items = .809.

The factor analysis extracts four factors. Item Ss2 “I am not afraid to go to bat for the rights of others even if it means I will be ridiculed” loads weakly on the expected self-sacrifice dimension. Respondents from all participating sectors answered the PSM questions, and the factor loading of Item Ss2 might improve when only looking at respondents from individual sectors separately. In this analysis, however, it has not been included.

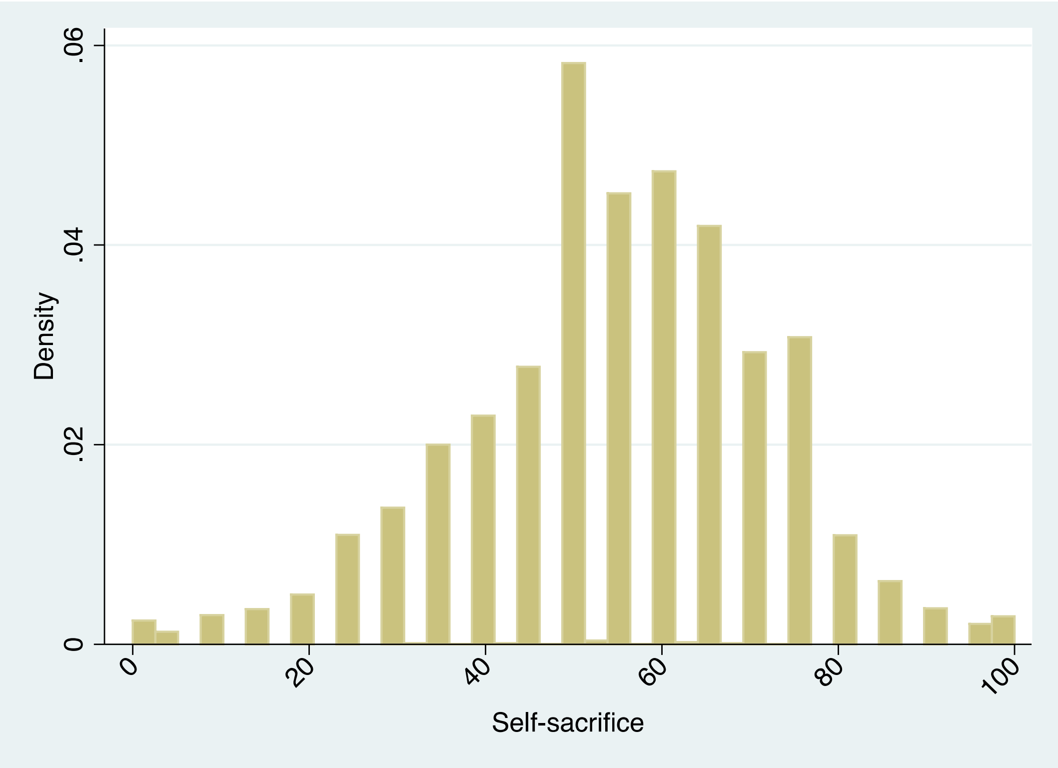
Self-Sacrifice

Table 41: Factor loadings: Self-sacrifice

	Loadings
I believe in putting duty before self.	.706
Making a difference in society means more to me than personal achievements.	.625
I feel people should give more back to society than they get from it.	.532
I am willing to risk personal loss to help society.	.762
I am prepared to make sacrifices for the good of society.	.742

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 9222. Cronbach’s alpha = .816

Figure 41. Public service motivation – self-sacrifice, distribution



Note: N=9316, mean = 54.69, std. dev. = 17.11, min = 0, max = 100

The responses are normally distributed with a mean of 54.69.

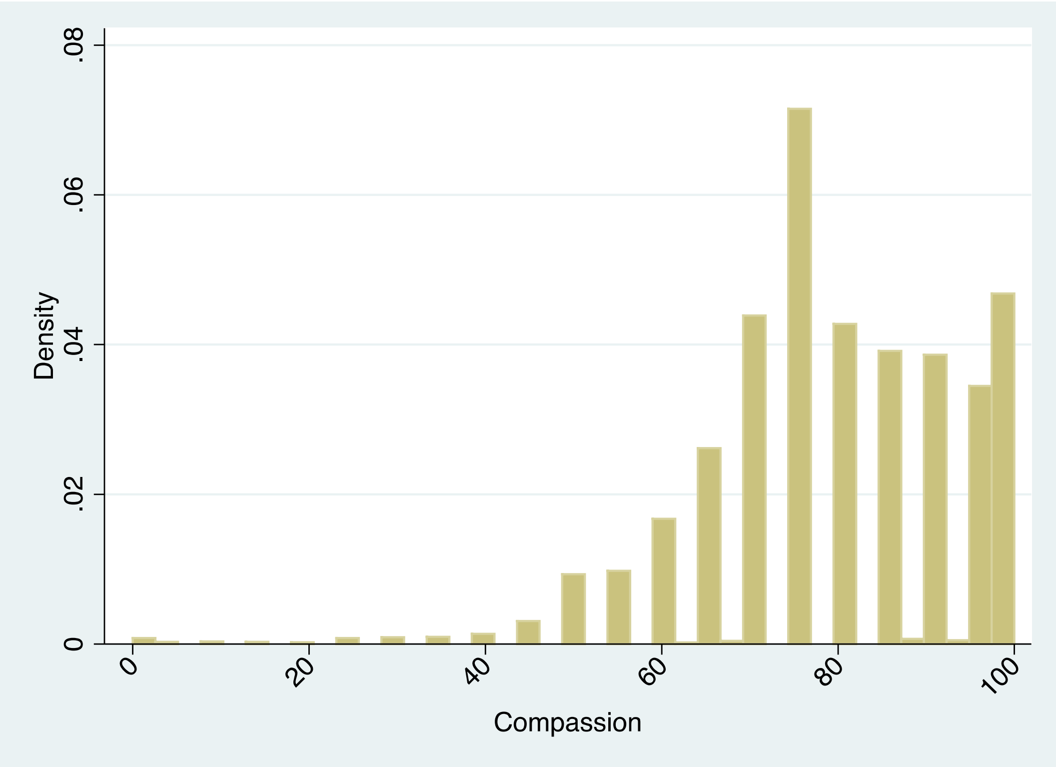
Compassion

Table 42: Factor loadings: Compassion

	Loadings
It is difficult for me to contain my feelings when I see people in distress.	.759
For me, considering the welfare of others is one of the most important values.	.708
I get very upset when I see other people being treated unfairly.	.752
I feel sympathetic to the plight of the underprivileged.	.740
I am often reminded by daily events about how dependent we are on one another	.552

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 9327. Cronbach's alpha = .834

Figure 42. Public service motivation - compassion, distribution



Note:. N=9422, mean = 78.88, std. dev. = 14.93, min = 0, max = 100

Many of the respondents indicate high values of compassion – or even the maximum score on this dimension. The mean score is 78.88.

Attraction to Public Policy

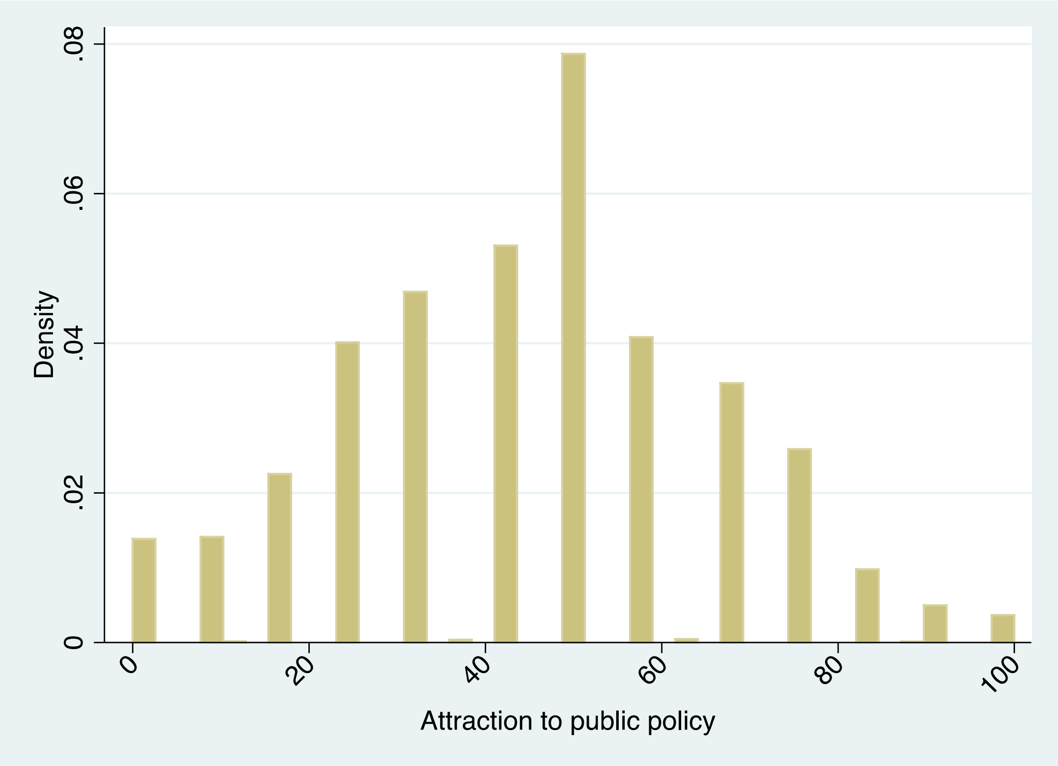
Table 43: Factor loadings: Attraction to public policy

	Loadings
I generally associate politics with something positive.	-.645
The give and take of public policy making doesn't appeal to me (reversed).	.658
I do not care much for politicians (reversed)	.731

Note: Extraction method: Principal factor analysis. Reversed: Code is reversed. One factor with an Eigenvalue over 1 was extracted. N = 9341. Cronbach's alpha = .759

The alpha value shows a good internal reliability. The responses are normally distributed with a mean of 44.94

Figure 43. Public service motivation - attraction to public policy, distribution



Note: n=9403, mean = 44.94, std. dev. = 21.05, min = 0, max = 100

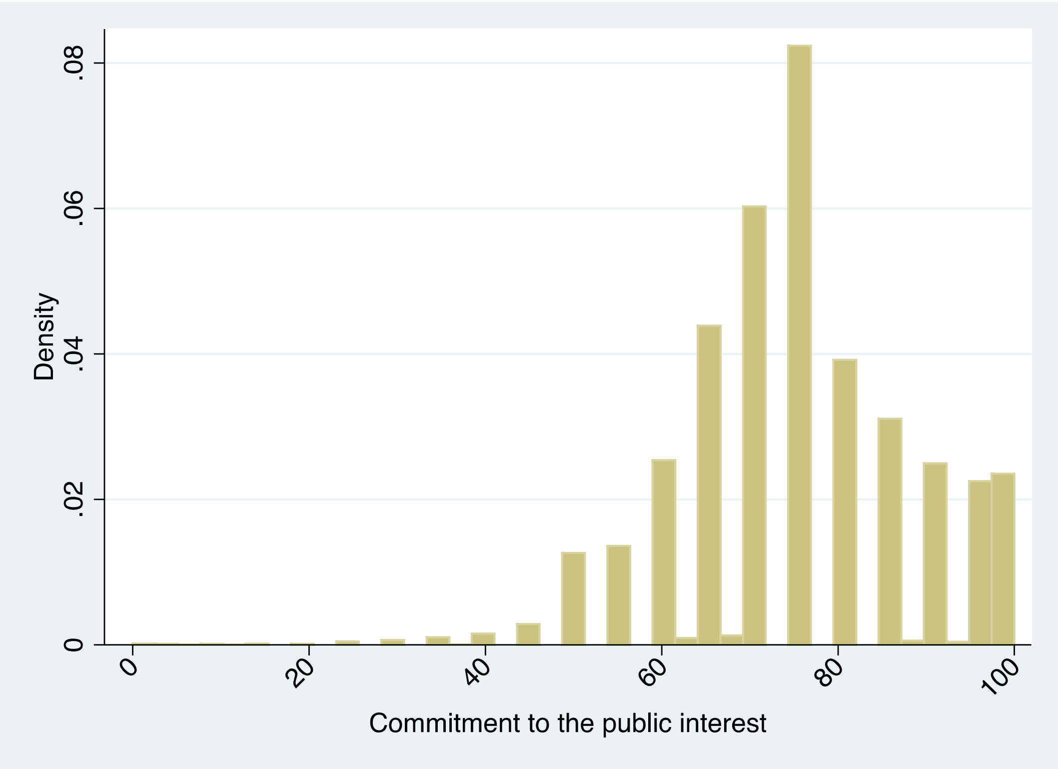
Commitment to the Public Interest

Table 44: Factor loadings: Commitment to the public interest

	Loadings
It is important for me to contribute to the common good.	.715
I consider public service my civic duty.	.691
It is important for me that public services contribute to the common good.	.618
Meaningful public service is very important to me	.619
I would prefer seeing public officials do what is best for the whole community, even if it harmed my interests.	.507

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 9135. Cronbach's alpha = .771

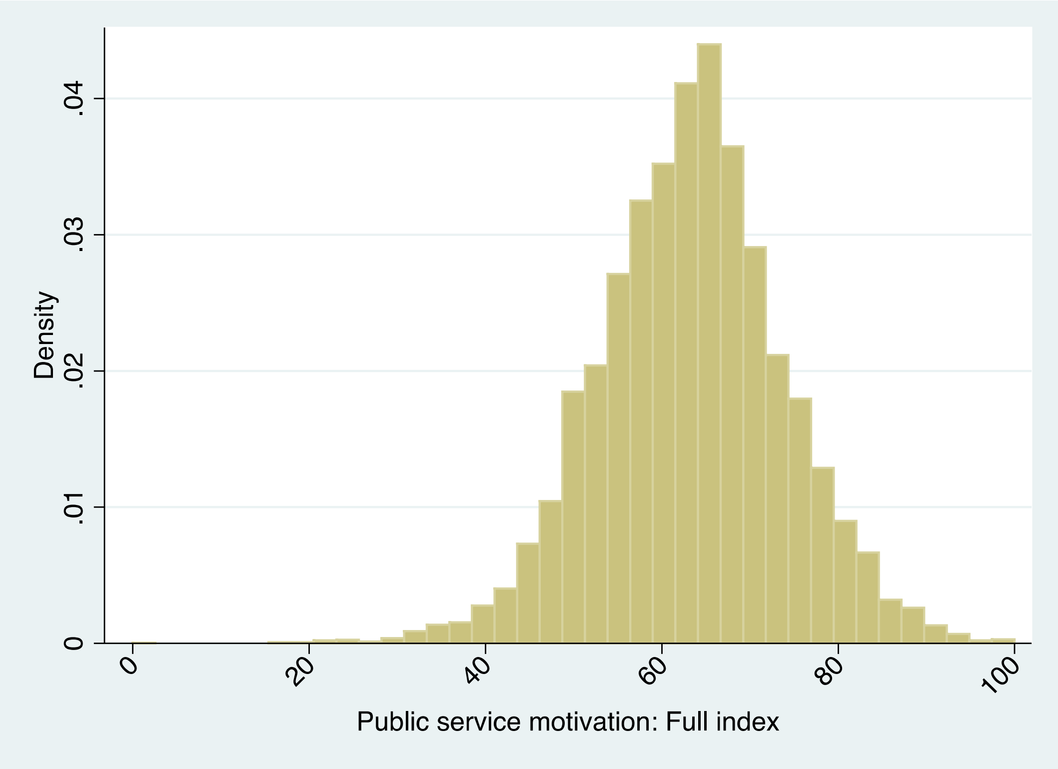
Figure 44. Public service motivation - Commitment to the public interest, distribution



Note:. n=9305, mean = 74.79, std. dev. =13.43, min = 0, max = 100

The alpha value shows good internal reliability. The responses are normally distributed with a high mean of 74.79

Figure 45. Public service motivation - full index, distribution



Note: Second-order formative scale comprised of self-sacrifice, compassion, attraction to public policy and commitment to the public interest components. N=9116, mean = 63.32, std. dev. = 10.51, min = 0, max = 100

The distribution of a second-order public service motivation construct approaches a normal distribution.

User orientation (LLB)

User orientation is defined as “motivation to help the specific user of public services (Andersen & Pedersen 2012)”. Whereas PSM is traditionally viewed as directed towards collective entities (groups of others); user orientation focuses on *specific* individual receiving a service e.g. an individual student, child or patient. Distinguishing between the motivation to do good for the individual client or collective entities is relevant, as studies suggest that the two types of motivation affects behavior differently, raising the question of whether one may harm the collective by doing one’s utmost in the best interest of an individual client (Andersen et al 2013, Jensen and Andersen 2013).

User orientation is measured by a three-item reflexive index. Items have been previously tested in the Danish context (Andersen & Pedersen 2012). All items were measured using likert format questions ranging from totally disagree to totally agree. The statistical descriptions includes answers from all five participating LEAP-sectors (the primary and lower secondary school sector, the upper secondary school sector, the daycare sector, tax sector and bank sector)

Table 45. User orientation

	User orientation	Source
user1	The individual user/customer is more important than formal rules *Hensynet til den enkelte er vigtigere end hensynet til formelle regler*	Andersen & Pedersen 2012
user2	It gives me energy to know that I helped the user/customer *Det giver mig energi at vide, at jeg har gjort det godt for kunderne/brugerne*	Andersen & Pedersen 2012
user3	If the user/customer is satisfied – the job is done *Hvis kunderne/brugerne er tilfredse – så er opgaven løst*	Andersen & Pedersen 2012

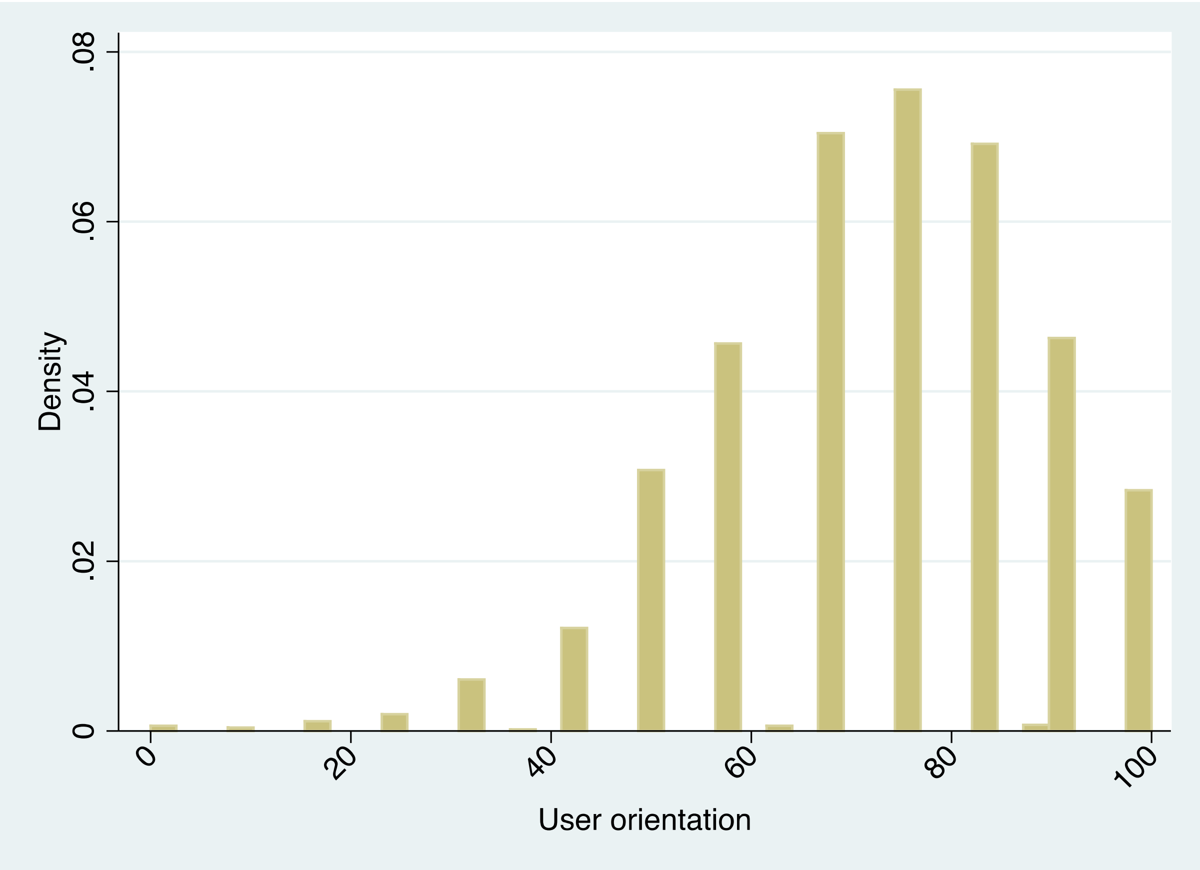
Table 46. Factor analysis: User orientation

	Loadings
The individual user/customer is more important than formal rules	.499
It gives me energy to know that I helped the user/customer	.526
If the user/customer is satisfied – the job is done	.466

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue = 0.74 was extracted. N = 8752. Cronbach's alpha = .532

The factor analysis extracts one factor but the with an eigenvalue below one. The alpha value shows acceptable internal reliability. The responses are normally distributed with a mean of 72.53.

Figure 46. User orientation, distribution



Note:. N=8832, mean = 72.53, std. dev. = 16.61, min = 0, max = 100

Intrinsic motivation (LLB)

Intrinsic motivation refers to doing something because it is inherently interesting or enjoyable (Ryan and Deci 2000). Whereas PSM and user orientation are other-regarding types of motivations, intrinsic motivation is egocentric by being based on the self-enjoyment of an activity. Like PSM and user-orientation, intrinsic motivation has been linked to desirable employee outcome such as greater engagement, better performance and greater psychological wellbeing (Ryan and Deci 2000, Gagne and Deci 2005, Weibel et al 2010).

Intrinsic motivation is measured by a four-item reflexive index utilizing items previously studied in the Danish context (Jacobsen et al 2013). All items were measured using likert format questions ranging from totally disagree to totally agree. The statistical descriptions includes answers from all five participating LEAP-sectors (the primary and lower secondary school sector, the upper secondary school sector, the daycare sector, tax sector and bank sector)

Table 47. Intrinsic motivation

	Intrinsic motivation	Source
intrin1	I very much enjoy my daily work *Jeg nyder I høj grad mit daglige arbejde*	Jacobsen et al. (2013)
intrin2	A rather large part of my tasks at work are boring *En ret stor del af mine arbejdsopgaver er kedelige*	Jacobsen et al. (2013)
intrin3	My work is very exciting *Mit arbejde er meget spændende*	Jacobsen et al. (2013)
intrin4	I like performing most of my work processes *Jeg kan godt lide at udføre de fleste af mine arbejdsopgaver*	Jacobsen et al. (2013)

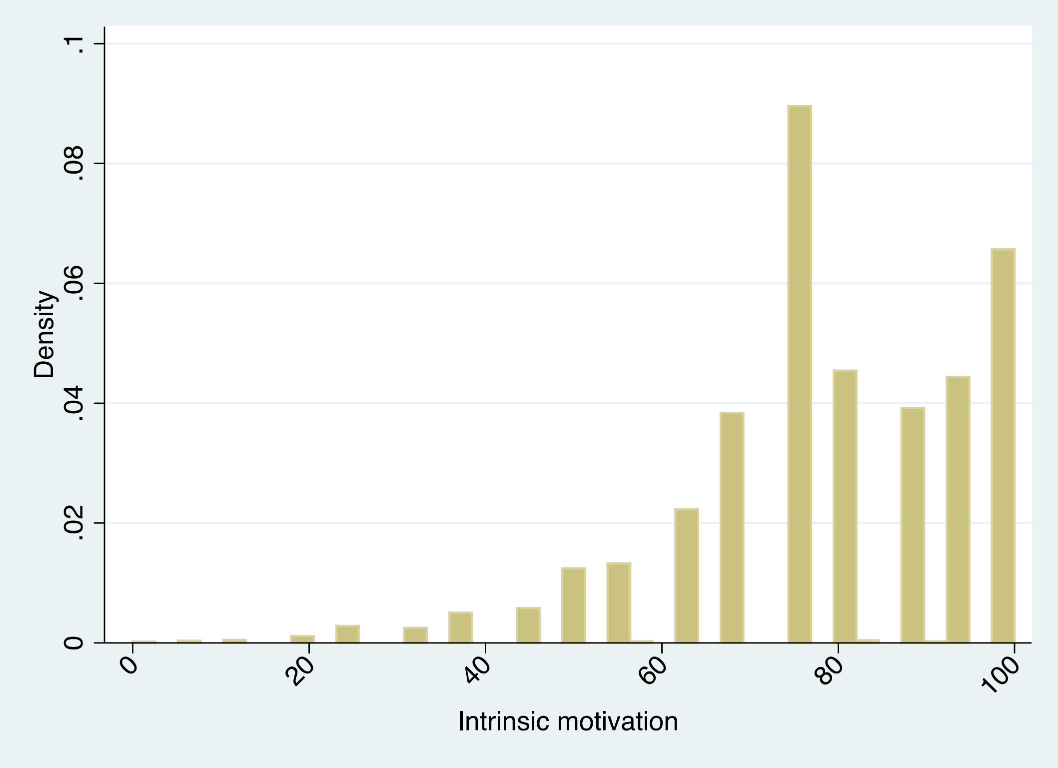
Table 48. Factor analysis: Intrinsic motivation

	Loadings
I very much enjoy my daily work	.801
A rather large part of my tasks at work are boring (reversed)	-.623
My work is very exciting	.827
I like performing most of my work processes.	.781

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 9278. Cronbach's alpha = .855

The factor analysis extracts one factor. Many of the respondents indicate high values of intrinsic motivation – or even the maximum score on this dimension. The mean score is 78.63

Figure 47. Intrinsic motivation, distribution



Note: N = 9346, Mean = 78.63, Std. dev =16.77, Min = 0, Max = 100

Basic needs satisfaction (LLB)

Self-determination theory (SDT) argues that the need for autonomy, competence and relatedness are three basic needs important for all individuals, and that fulfillment of these needs is necessary for motivation maintenance, growth and internalization (Deci & Ryan 2000, Gagne & Deci 2005). The need for autonomy concerns “experiencing choice and feeling like the initiator of one’s own actions” (Baard et al. 2004: 2046), the need for competence concerns “succeeding at optimally challenging tasks, being able to attain desired outcomes, the gaining of skills and knowledge and the feeling of being generally effective" (Baard et al.2004: 2046) and the need for relatedness concerns “the desire to feel connected to others –to love and care, and to be loved and cared for, as well as to establish a sense of mutual respect and reliance with others” (Deci and Ryan 2000: 231, Baard et al. 2004: 2046). While the need for relatedness is defined in rather broad terms, it is traditionally measured in a more narrow sense by items reflecting relatedness to co-workers. Given that many public service employees works with a specific target-group (e.g. patients, children or students), we include items reflecting relatedness to the specific target group.

The three traditionally basic needs fulfillment concepts are build on measures applied by existing studies. In particular, the items draw on the “Basic Need Satisfaction at Work Scale” (BNS-work scale) used by Deci et al. 2001 (amongst others) and recent modification of these" items" (Vandenabeele 2013). Each need fulfillment measure is captured by three items with likert format questions ranging from totally disagree to totally agree. For the three traditionally basic needs fulfilment concepts, results includes answers from all five participating sectors (the primary and lower secondary school sector, the upper secondary school sector, the daycare sector, tax sector and bank sector), whereas results for relatedness to a target group only includes answers from employees with a specific user-contact (employees from the he primary and lower secondary school sector, the upper secondary school sector and the daycare sector).

Fulfillment of the need for autonomy

Table 49. Basic needs satisfaction - Fulfillment of the need for autonomy

	Fulfillment of the need for autonomy	Source
bns4	I feel like I can make a lot of inputs to deciding how my job gets done *Jeg føler, at jeg har stor indflydelse på, hvordan mit arbejde udføres*	BSN-work scale (1) Vandenabeele 2013
bns5	I am free to express my ideas and opinions in my job *Jeg har frihed til at udtrykke mine ideer og holdninger på arbejdet*	BSN-work scale (8) Vandenabeele 2013
bns6	There are good opportunities for me to decide for myself how to go about my work *Jeg har gode muligheder for selv at bestemme, hvordan jeg udfører mit arbejde*	Modified from BSN-work scale (20)

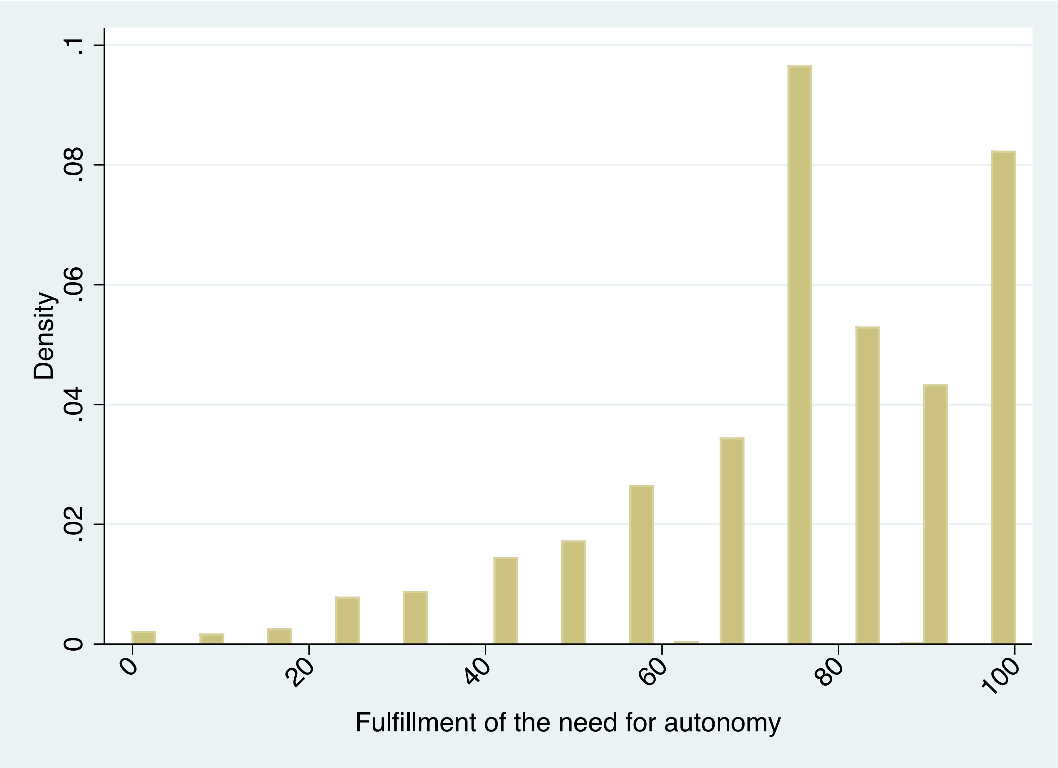
Table 50. Factor analysis: Basic needs satisfaction - Fulfillment of the need for autonomy

	Loadings
I feel like I can make a lot of inputs to deciding how my job gets done	.858
I am free to express my ideas and opinions in my job	.621
There are good opportunities for me to decide for myself how to go about my work	.844

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 8181. Cronbach's alpha = .837

The factor analysis extracts one factor. The alpha value shows good internal reliability. Many of the respondents indicate high fulfillment of the need for autonomy– or even the maximum score on this concept. The mean score is 76.08

Figure 48. Basic needs satisfaction - Fulfillment of the need for autonomy, distribution



Note: N=8222, mean = 76.11, std. dev. = 20.50, min = 0, max = 100

Fulfillment of the need for competence

Table 51. Basic needs satisfaction - Fulfillment of the need for competence

	Fulfillment of the need for competence	Source
bns10	I feel very competent when I am at work *Jeg føler mig meget kompetent, når jeg er på arbejde*	Modified from BSN-work scale (3)
bns11	People at work tell me I am good at what I do *Folk på mit arbejde fortæller mig, at jeg er god til det, jeg laver*	BSN-work scale (4) Vandenabeele 2013
bns12	Most days, I feel a sense of accomplishment from working *De fleste dage har jeg en følelse af at have præsteret noget på mit arbejde*	BSN-work scale (12) Vandenabeele 2013

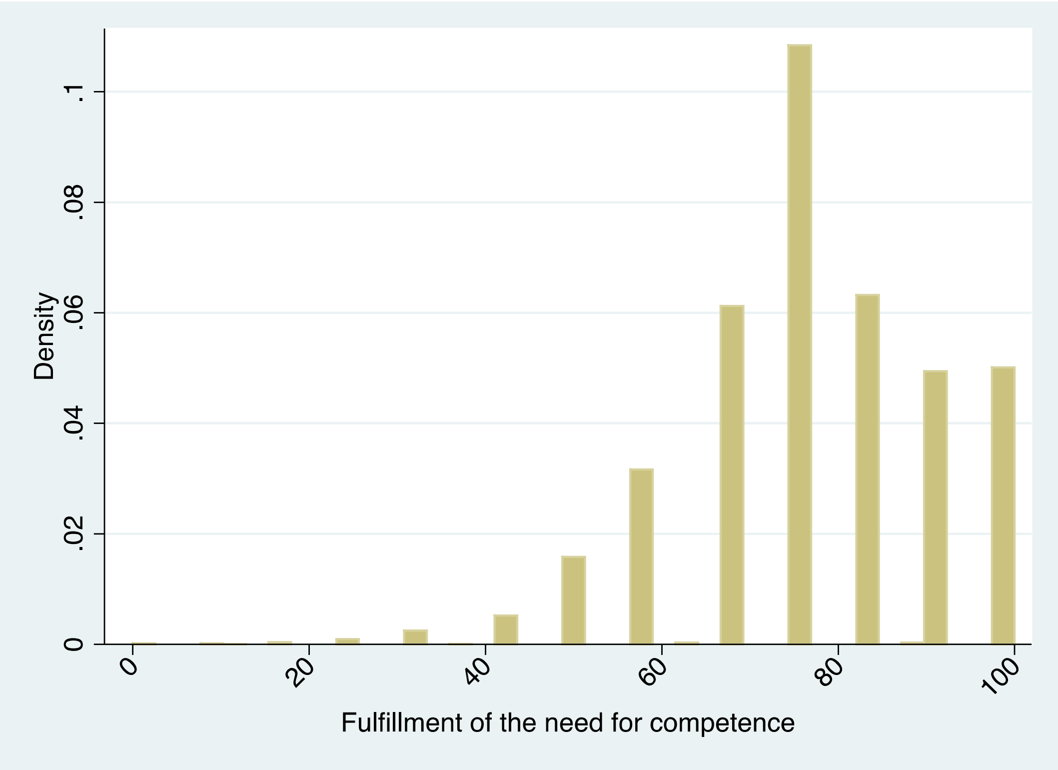
Table 52. Factor analysis: Basic needs satisfaction - Fulfillment of the need for competence

	Loadings
I feel very competent when I am at work	.666
People at work tell me I am good at what I do	.514
Most days, I feel a sense of accomplishment from working	.636

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 9278. Cronbach's alpha = .669

The factor analysis extracts one factor. The alpha value shows acceptable internal reliability. The responses are normally distributed with a high mean of 77.04

Figure 49. Basic needs satisfaction - Fulfillment of the need for competence, distribution



Note: N=9333, mean = 77.04, std. dev. = 14.86, min = 0, max = 100

Fulfillment of the need for relatedness to co-workers

Table 53. Basic needs satisfaction - Fulfillment of the need for relatedness to co-workers

	Fulfillment of the need for relatedness to co-workers	Source
bns7	I really like the people I work with *Jeg kan rigtig godt lide de mennesker, jeg arbejder sammen med*	BSN-work scale (2) Vandenabeele 2013
bns8	The people I work with seem to like me *De mennesker, jeg arbejder sammen med, virker til at kunne lide mig*	Modified from BSN-work scale (18) Vandenabeele 2013
bns9	I feel connected to the people I work with *Jeg føler mig knyttet til de mennesker, jeg arbejder sammen med*	Own

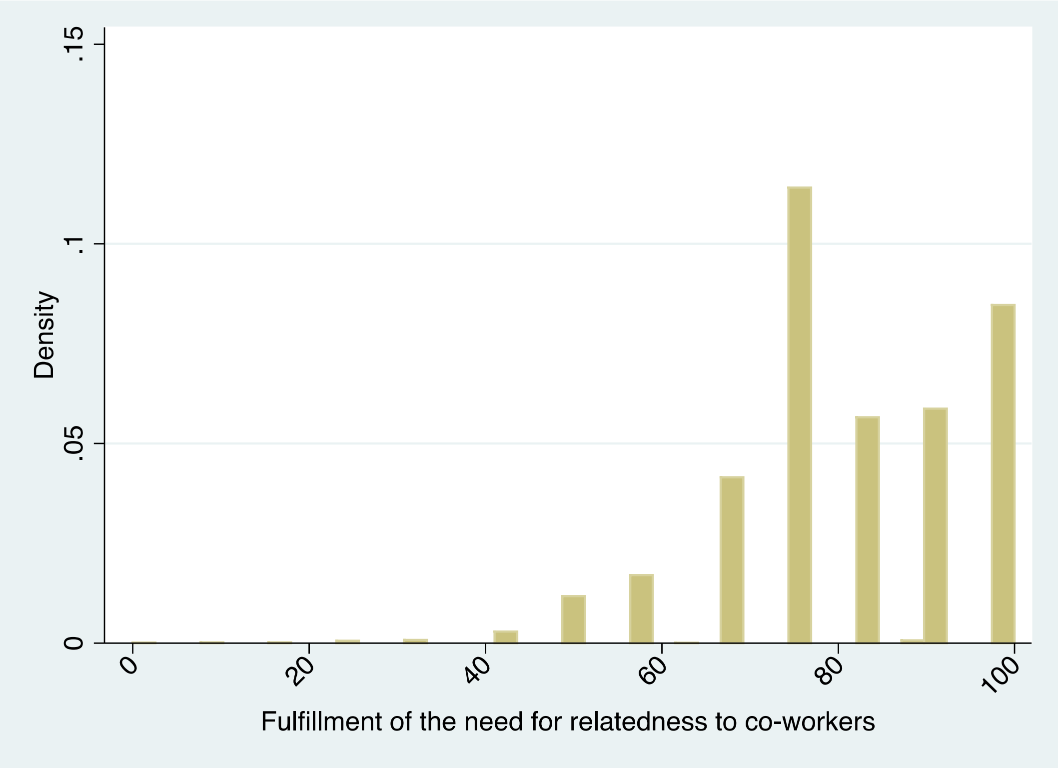
Table 54. Factor analysis: Basic needs satisfaction - Fulfillment of the need for relatedness to co-workers

	Loadings
I really like the people I work with	.772
The people I work with seem to like me	.729
I feel connected to the people I work with	.691

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 9289. Cronbach's alpha = .799

The factor analysis extracts one factor. The alpha value shows good internal reliability. Many of the respondents indicate high fulfillment of the need for relatedness to co-workers– or even the maximum score on this concept. The mean score is 81.29

Figure 50. Basic needs satisfaction - Fulfillment of the need for relatedness to co-workers, distribution



Note:. N=9332, mean = 81.28, std. dev. = 14.44, min = 0, max = 100

Fulfillment of the need for relatedness to specific target-group

Table 55. Basic needs satisfaction - Fulfillment of the need for relatedness to specific target-group

	Fulfillment of the need for relatedness to co-workers	Source
bns1	I really like the (specific group) I work (work with)* *Jeg kan rigtig godt lide de (brugergruppe), som jeg (arbejder med)*	Modified from BSN work-scale (2)/Own
bns2	The (specific group) I work with seem to like me *De (brugergruppe), som jeg arbejder med, virker til at kunne lide mig*	Modified from BSN-work scale (18)/Own
bns3	I feel connected to the (specific group) I work with *Jeg føler mig knyttet til de (brugere), som jeg (arbejder med)*	Own

*e.g. schools: ”I really like the students I teach”

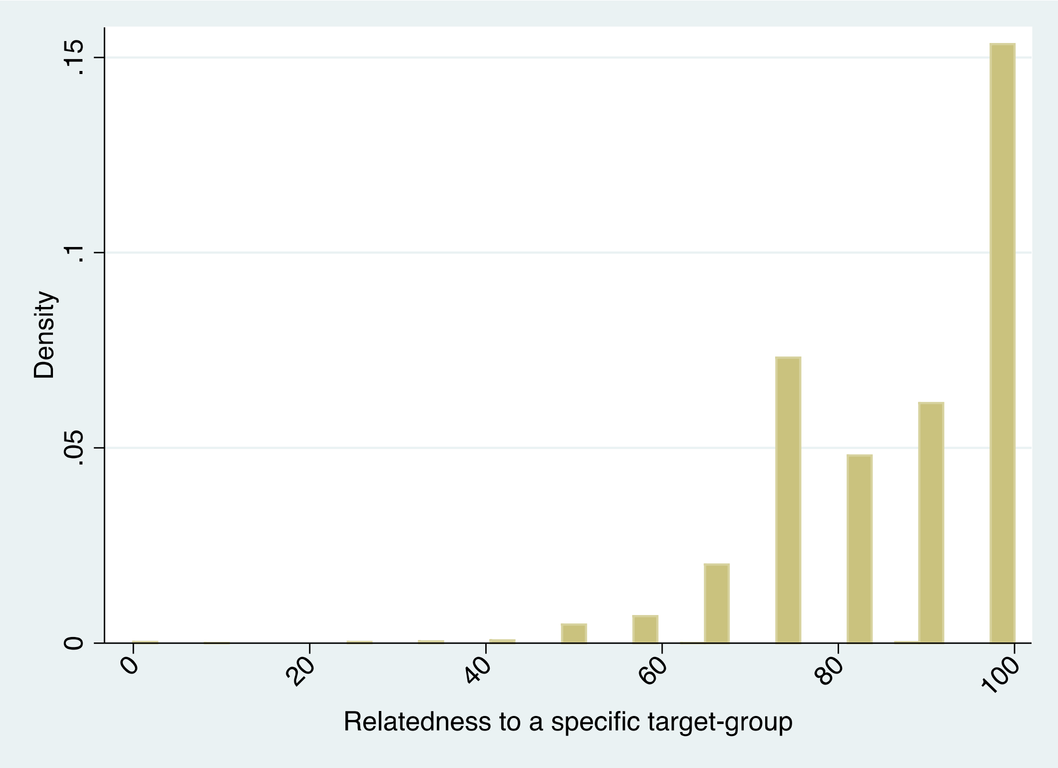
Table 56. Factor analysis: Basic needs satisfaction - Fulfillment of the need for relatedness to specific target-group

	Loadings
I really like the (specific group) I work (work with)	.766
The (specific group) I work with seem to like me	.720
I feel connected to the (specific group) I work with	.681

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 9289. Cronbach’s alpha = .788

The factor analysis extracts one factor. The distribution is skewed to the left with a high mean of 87,89, indicating that employees delivering a public service to a specific target group feel highly related to this group.

Figure 51. Basic needs satisfaction - Fulfillment of the need for relatedness to specific target-group, distribution



Note: N=5881, mean = 87.91, std. dev. = 13.26, min = 0, max = 100

Person-environment fit (UTJ)

Person-environment (P-E) fit theory deals with the interaction between characteristics of the employee and the environment of the organization (Muchinsky and Monahan 1987). We distinguish between person-organization (P-O) fit, which concerns the compatibility between people and entire organizations, and person-job (P-J) fit, which refers to the compatibility between a person's characteristics and those of the job (Kristof-Brown, Zimmerman & Johnson 2005).

In terms of measurement, P-O fit captures employees' assessment of how well personal and organizational values match, while P-J fit captures whether the job enables the employee to pursue ends of personal importance. As an alternative to these inherently subjective measures, P-O fit is also operationalized as value profile match. Here, both leaders and employees from the day care sector were asked to rank an identical set of 5 values.

Person-Organization Fit

Table 57. Person-organization fit

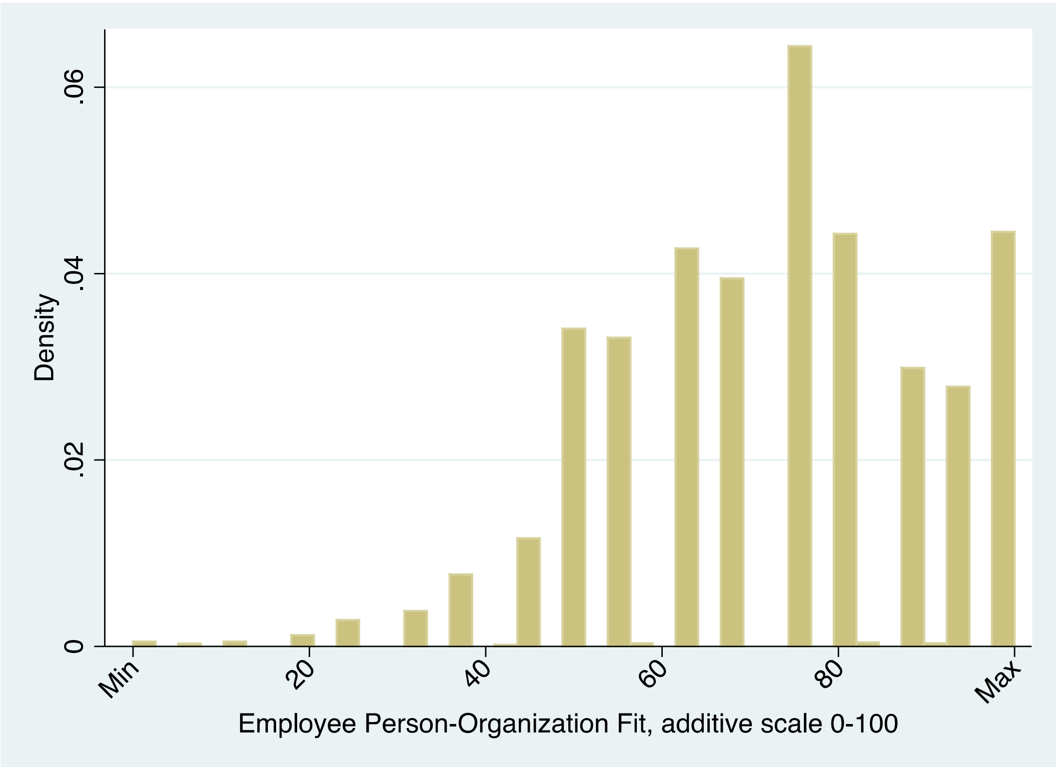
		Source
pof1	My values are very similar to the values of the organization *Arbejdspladsens værdier stemmer godt overens med mine egne*	Cable and Judge 1996
pof2	What this organization stands for is important to me *Det, arbejdspladsen står for, er vigtigt for mig*	O'Reilly and Chatman 1986
pof3	I feel a strong sense of 'belonging' to my organization *Jeg føler en stærk tilknytning til min arbejdsplads*	Bright 2007
pof4	I am not very comfortable with the values of my organization (reversed) *Jeg føler mig ikke så godt tilpas med værdierne på min arbejdsplads*	Bright 2007

Table 58. Factor analysis: Person-organization fit

	Loadings
My values are very similar to the values of the organization	.800
What this organization stands for is important to me	.746
I feel a strong sense of 'belonging' to my organization	.674
I am not very comfortable with the values of my organization (reversed)	-.592

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. Reversed: Code is reversed. N = 9150. Cronbach's alpha = .800.

Figure 52. Person-organization fit, distribution



Note: n=9265, mean =72.22, std. dev. = 18.15, min = 0, max = 100

The distribution for P-O fit is left-skewed indicating that employees in general perceive their values to match those of their organization fairly well (mean = 72.22,).

Person-Job Fit

Table 59. Person-job fit

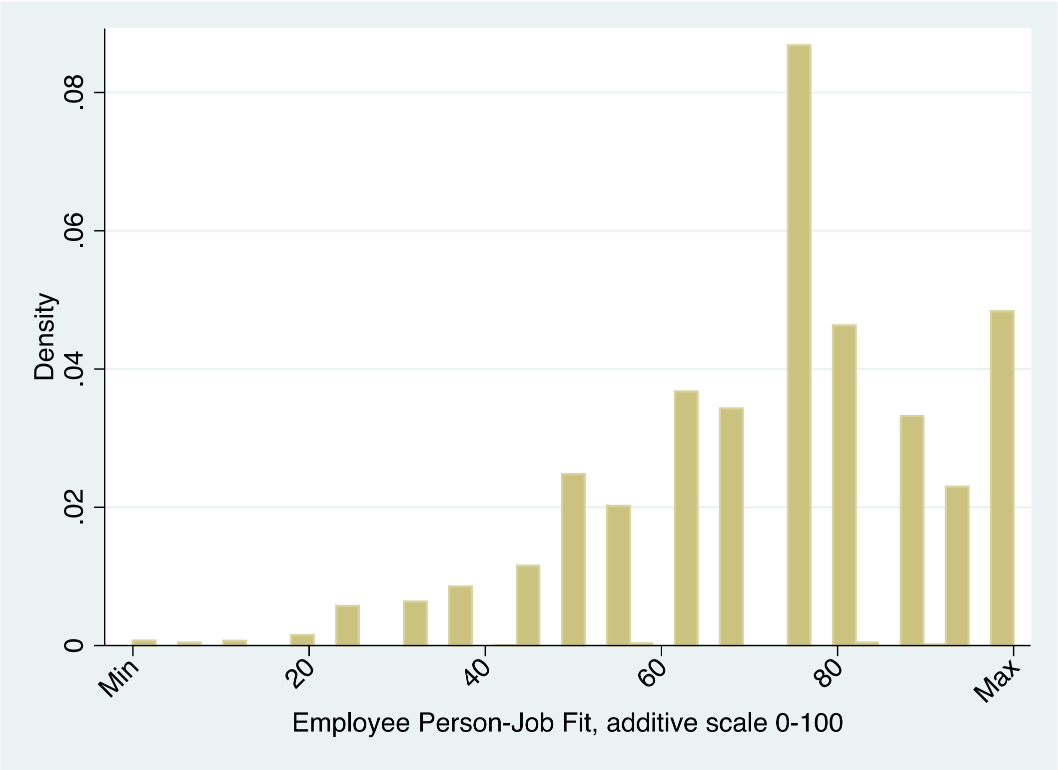
pjf1	My job fulfills the attributes that I look for in a job *Mit arbejde opfylder de egenskaber, jeg leder efter i et arbejde*	Cable and DeRue 2002
pjf2	My job does not enable me to do the work I would like to do *I mit job kan jeg ikke udføre den slags arbejde, som jeg helst vil*	Saks and Ashforth 1997
pjf3	My job is a good match for me *Mit job passer godt til mig*	Saks and Ashforth 1997
pjf4	My job fulfills my demands for what a good job should be *Mit job opfylder mine krav til, hvad et godt job bør indeholde*	Saks and Ashforth 1997

Table 60. Factor analysis: Person-job fit

	Loadings
My job fulfills the attributes that I look for in a job	.870
My job does not enable me to do the work I would like to do (reversed)	-.542
My job is a good match for me	.806
My job fulfills my demands for what a good job should be	.842

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. R: Code is reversed. N = 9137. Cronbach's alpha = .839.

Figure 53. Person-job fit, distribution



Note. n=9213, mean =72.98, std. dev. = 18.69, min = 0, max = 100

The distribution for P-J fit is left-skewed indicating that employees in general perceive their personal preferences to be matched well by the attributes of their job (mean = 72.99).

Perceived societal impact (UTJ)

Perceived societal impact concerns individuals' belief that they can contribute to the welfare of other people and society at large through their daily work activities (Bellé 2013). Two questions capture employees' self-assessed impact of their job activities on other people and society. The questions have been used to examine the interaction between individuals' motives for serving the public and their opportunities to pursue such ends in their job (e.g., Steijn 2008, Kjeldsen 2012).

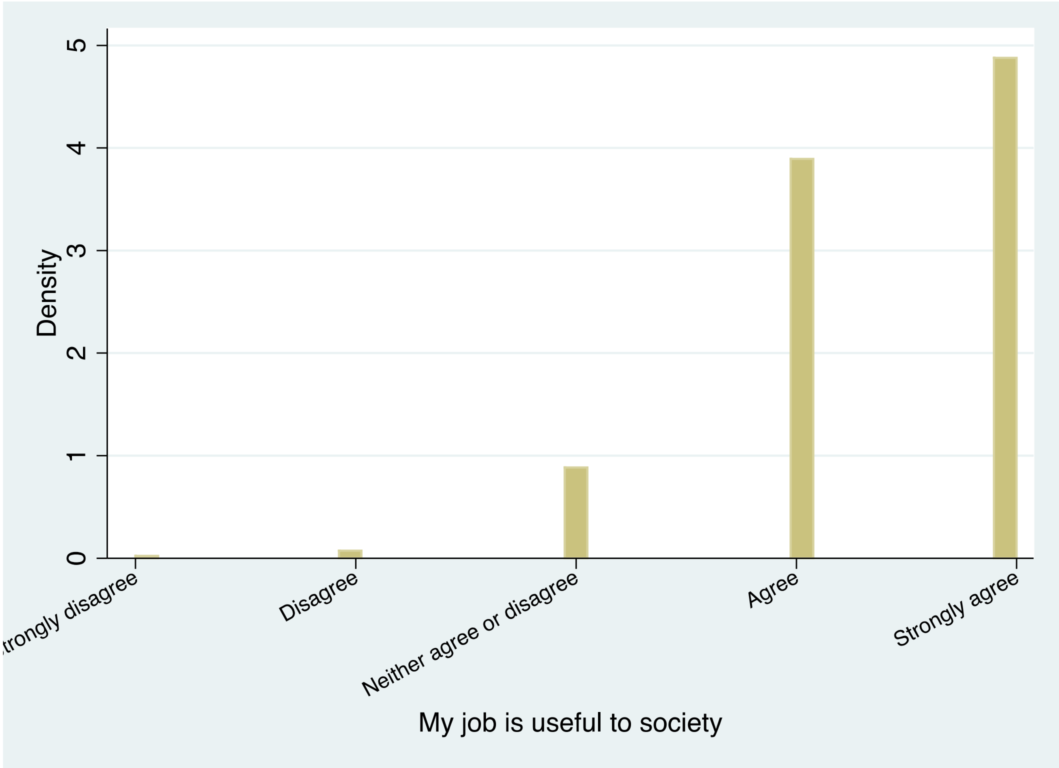
Table 61. Prosocial impact of the job, items

	Employees	Source
psi1	My job is useful to society *Mit arbejde gavner samfundet*	Steijn 2008
psi2	In my job I can help other people *Jeg kan hjælpe andre mennesker i mit arbejde*	Taylor 2008

Table 62. 'My job is useful to society', distribution

Item: My job is useful to society					
Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	N
.22 %	.75 %	9.03 %	39.97 %	50.03 %	9192

Figure 54. 'My job is useful to society', distribution



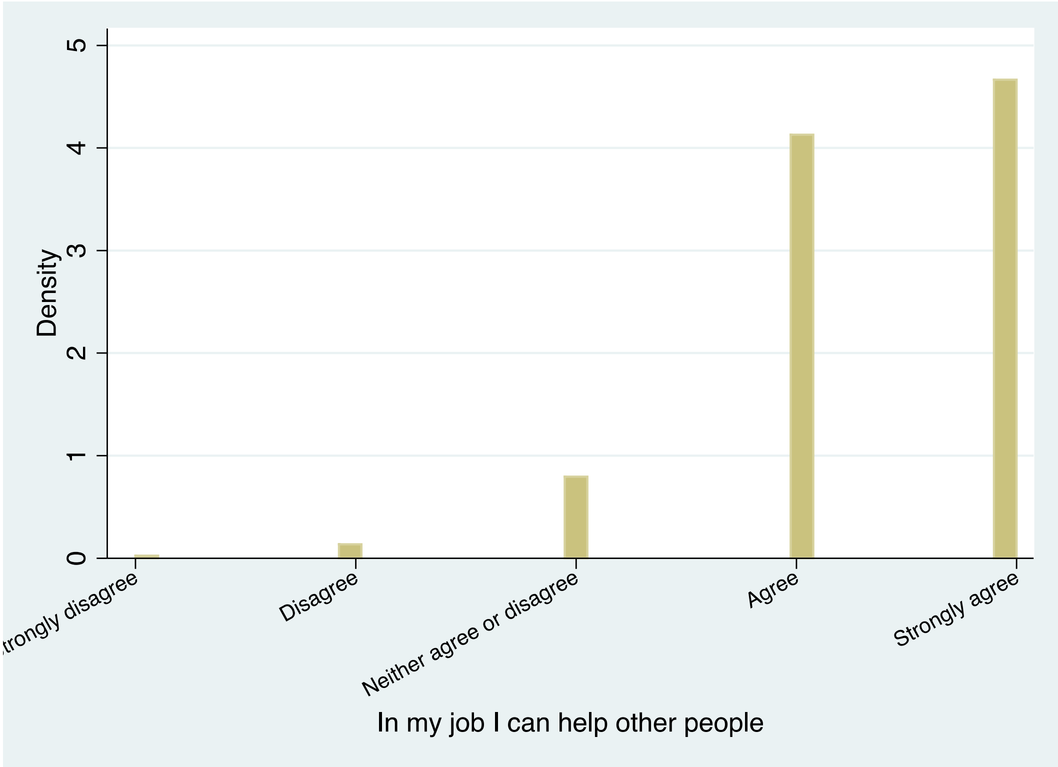
Note. N=9290, mean =4.39, std. dev. = .70, min = 1, max = 5

The distribution is highly left-skewed with a clear majority of respondents, who agree or strongly agree that their job is useful to society (mean = 4.39).

Table 63. 'In my job I can help other people', distribution

Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	N
.25 %	1.40 %	8.11 %	42.35 %	47.89 %	9192

Figure 55. 'In my job I can help other people', distribution



Note. N=9290, mean =4.36, std. dev. = .71, min = 1, max = 5

The distribution is highly left-skewed with a clear majority of respondents, who agree or strongly agree that they can help other people in their job (mean = 4.36).

Vision valence (UTJ)

Vision valence concerns the importance ascribed by individuals to the core goals of the organization. It may increase employees' motivation by making the job more important (Wright 2007), and transformational leadership has been suggested as an important antecedent of individuals' perceived mission valence (Wright et al. 2012). In terms of measurement, the project draws on previous studies in public sector contexts (e.g., Wright et al. 2012).

Table 64. Vision valence, items

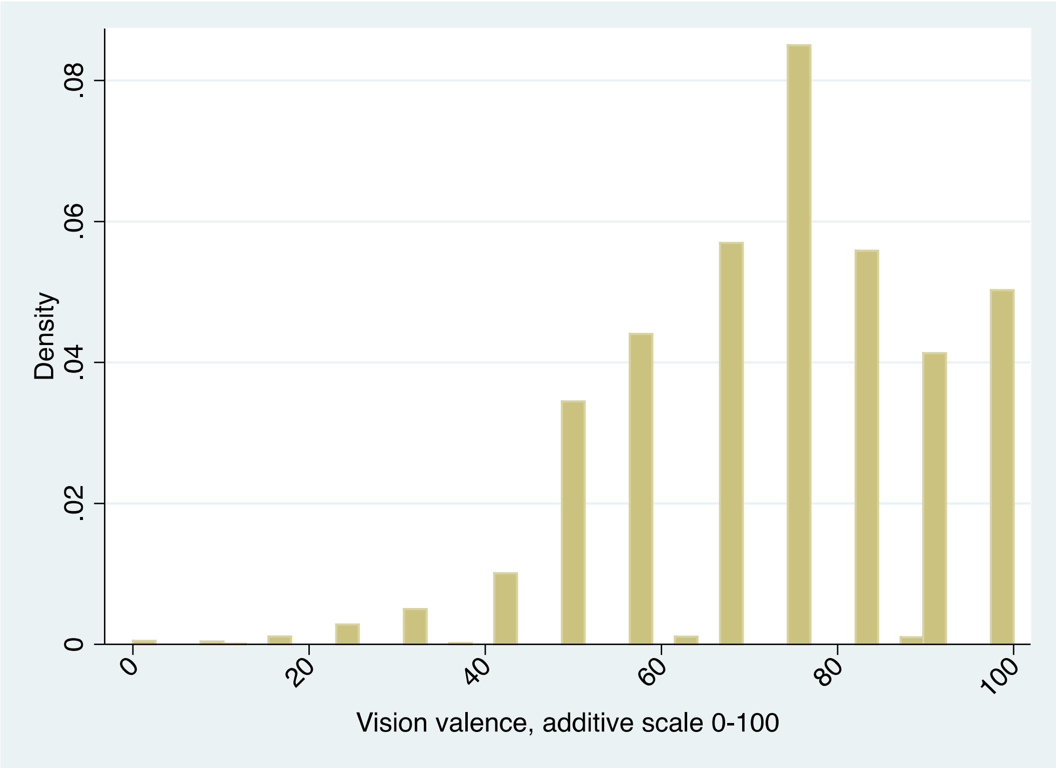
		Source
vval1	The vision of this organization is of personal importance to me *Visionen for denne organisation er vigtig for mig personligt*	Modified from Van Loon, Vandenabeele and Leisink 2013
vval2	This organization provides valuable public service *Denne organisation leverer værdifuld offentlig service*	Wright et al. 2012
vval3	I believe that the priorities of this organization are quite important *Jeg mener, at prioriteterne i denne organisation er vigtige*	Wright et al. 2012

Table 65. Factor analysis: Vision valence

	Loadings
The vision of this organization is of personal importance to me	.664
This organization provides valuable public service	.550
I believe that the priorities of this organization are quite important	.701

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N = 9164. Cronbach's alpha = .716.

Figure 56. Vision valence, distribution



Note: n=9164, mean = 73.80, std. dev. = 17.48, min = 0, max = 100

The distribution for vision valence is left-skewed implying that employees generally perceive the vision of their organization to be important (mean = 73.80).

Value conflict (daycare) (UTJ)

Leaders and employees were asked to rank five values by assigning each value a number from 1-5. 1 is the most desirable value to achieve and 5 the least desirable. Each value was assigned a number from 1-5 and each number was could only be assigned to one value. The five values are:

Table 66. Value conflict, items

		Source
1	Needs of individual users *At opfylde individuelle forældreønsker*	Own
2	Optimal resource allocation *At få mest muligt ud af de tilgængelige ressourcer*	Krogsgaard et al. 2014
3	General societal responsibility *At leve op til et generelt samfundsansvar*	Krogsgaard et al. 2014
4	Compliance with professional norms *At leve op til faglige standarder*	Krogsgaard et al. 2014
5	Cooperation with related organizations *At skabe tæt sammenhæng med kommunens øvrige tilbud, f.eks. skoler og SFO*	Own

Table 67 reports the mean score for each value as assigned by leaders and employees, respectively. A low mean score implies that respondents perceive the value to be very desirable.

Table 67. Value conflict, means of items

Leaders			Employees	
Value	Mean		Value	Mean
Needs of individual users	3.82		Needs of individual users	3.53
Optimal resource allocation	2.39		Optimal resource allocation	2.18
General societal responsibility	3.19		General societal responsibility	3.08
Compliance with professional norms	2.18		Compliance with professional norms	2.09
Cooperation with related organizations	3.41		Cooperation with related organizations	3.59
N	357		N	2661

Performance information experiment (only primary schools) (PAN)

To examine possible effects of performance information, a randomized sample of respondents (teachers) were given a treatment consisting of true and publicly available data describing average student performance at each respondent's school. The treatment set-up was adopted from Nielsen & Baekgaard (2013). The treatment was placed prior to the item below measuring teachers' ranking of goal priorities. The treatment group is identified in the data set by the dummy variable "perf_info".

Goal prioritization (primary schools, secondary schools) (PAN)

Most public organizations are designed to pursue multiple goals, and public employees may prioritize differently among these goals (Wenger et al. 2008; Nielsen 2014a). The relevant goal dimensions will depend on the particular type of organization under study. The ranking-item was only included in the leader surveys, and the goal-dimensions chosen here are specific to the Danish educational context. The priority ranking question is our own invention, but builds on an item from Thomas, Walker, and Meier (2011): 'What is the most important problem facing your school?'.

Table 68. Goal prioritization - primary schools, leaders

	Priority (percent)						
Item	1	2	3	4	5	Mean	N
Employee welfare *Medarbejdernes trivsel*	28.78	16.55	32.37	17.27	5.04	2.53	139
Parent satisfaction *Forældretilfredshed*	4.32	11.51	9.35	39.57	35.25	3.90	139
Student academic learning *Elevernes faglige læring*	47.48	20.86	20.86	5.04	5.76	2.01	139
Student welfare *Elevernes trivsel*	19.42	45.32	17.99	12.23	5.04	2.38	139
Preparing students for upper secondary education *Gymnasieforberedelse*	7.91	8.63	19.42	20.41	43.88	3.83	139

Table 69. Goal prioritization - primary schools, employees

	Priority (percent)								
Item	1	2	3	4	5	6	7	Mean	N
Student academic learning *Elevernes faglige læring*	27.13	19.88	16.58	15.36	11.83	4.99	4.23	2.967	1725
Preparing students for upper secondary education *Gymnasieforberedelse*	7.11	6.81	5.07	5.24	12.11	31.28	32.38	5.318	1717
Parent satisfaction *Forældretilfredshed*	6.22	6.74	6.22	5.00	10.81	27.66	37.36	5.399	1721
Students' social skills *Elevernes sociale kompetencer*	12.64	14.55	24.35	23.48	16.23	5.74	3.01	3.454	1725
Employee welfare *Medarbejdernes* trivsel	13.57	11.89	13.86	14.5	20.53	13.11	12.53	4.060	1724
Students' personal development *Elevernes personlige udvikling*	15.70	16.80	19.24	19.30	18.55	7.27	3.14	3.426	1720
Student welfare *Elevernes trivsel*	29.36	24.09	14.53	13.61	9.21	4.46	4.75	2.816	1727

Secondary schools

Table 70. Goal prioritization - secondary schools, distribution, leaders

	Priority (percent)								
	1	2	3	4	5	6	7	Mean	N
General education *Almen dannelse*	17.5	7.5	17.5	5	17.5	7.5	27.5	4.30	40
Preparation for higher education *Studieforberedelse*	17.5	10	12.5	15	17.5	12.5	15	4.03	40
High academic level *Højt fagligt niveau*	10	20	15	25	10	15	5	3.70	40
High retention rate *Høj gennemførelsesprocent*	5	15	15	10	17.5	32.5	5	4.38	40
Avoiding budget deficit *Undgå underskud på regnskabet*	25	10	10	2.5	10	7.5	35	4.25	40
Teacher well-being *Lærertrivsel*	12.5	20	7.5	20	15	15	10	3.90	40
Student well-being *Elevtrivsel*	10	15	22.5	20	10	15	7.5	3.80	40

Table 71. Goal prioritization - secondary schools, distribution, employees

	Priority (percent)								
	1	2	3	4	5	6	7	Mean	N
General education	25.09	13.40	16.13	15.66	15.85	7.64	6.23	3.32	1060
Preparation for higher education	12.77	15.42	17.03	16.75	23.27	10.69	4.07	3.71	1057
High academic level	24.03	17.44	19.42	14.70	12.35	7.82	4.24	3.14	1061
High retention rate	5.28	8.20	7.16	10.56	13.01	42.22	13.57	4.99	1061
Avoiding a budget deficit	9.26	2.84	2.84	3.59	4.54	12.85	64.08	5.86	1058
Teacher well-being	11.60	20.47	18.68	18.3	17.08	10.47	3.40	3.54	1060
Student well-being	21.58	23.09	16.87	18.85	10.84	4.71	4.05	3.05	1061

Acceptance of leadership (only primary schools) (PAN)

Employee acceptance of leadership, i.e., the managers' right to decide on important organizational matters, is potentially important in explaining the possibility and success of introducing management interventions and organizational changes. We developed four new items to measure employee acceptance of school principal leadership. The items were developed as general items, but have been adapted specifically to the school context.

Table 72. Acceptance of leadership, items

		Source
ledret_gs1	The school principal should not be able to decide the teachers' teaching methods *Skolelederen bør ikke kunne bestemme lærernes valg af undervisningsmetoder*	Own
ledret_gs2	The school principal should not be able to decide on the organization of how teachers cooperate. *Skolelederen bør ikke kunne bestemme over organiseringen af lærernes samarbejde*	Own
ledret_gs3	As a teacher you should accept that the school principal has the final say regarding the organization of your work. *Som lærer bør man acceptere, at skolelederen har det sidste ord i forhold til organiseringen af ens arbejde*	Own
ledret_gs4	As a teacher you should accept that the school principal decides on the school's personnel policy. *Som lærer bør man acceptere, at skolelederen bestemmer skolens personalepolitik*	Own

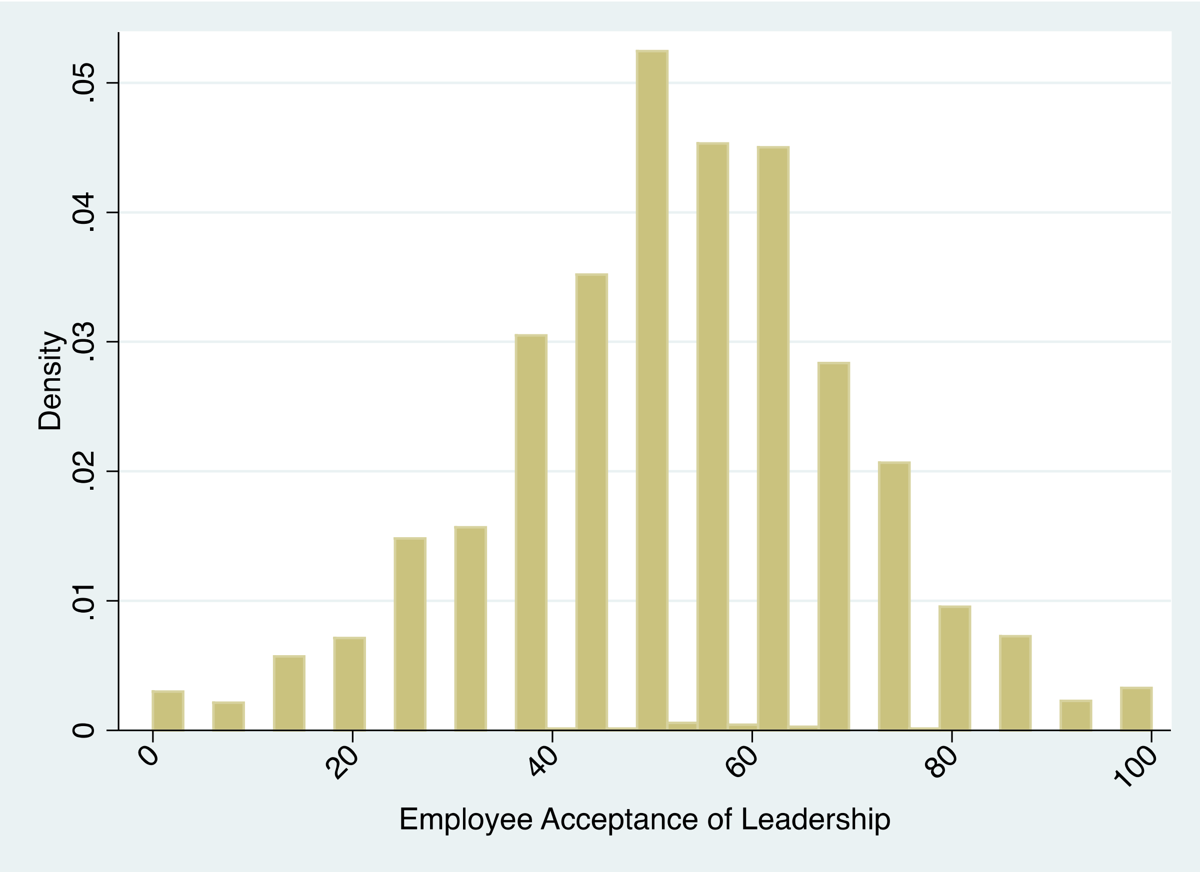
Table 73. Factor analysis: Acceptance of leadership

	Loadings
The school principal should not be able to decide the teachers' teaching methods (reversed)	.409
The school principal should not be able to decide on the organization of how teachers cooperate (reversed)	.547
As a teacher you should accept that the school principal has the final say regarding the organization of your work.	.605
As a teacher you should accept that the school principal decides on the school's personnel policy.	.514

Note: Reversed: Code is reversed. Extraction method: Principal factor. Only one factor with eigen value higher than 1 was extracted. N = 2322 Cronbach's alpha: 0.612

A factor analysis shows that although the 4 items load on a single dimension, the factor loadings are fairly low, ranging between 0.41 and 0.60. We do not argue that leadership acceptance is necessarily a reflexive index, and so we use all four items to construct a formative index.

Figure 57. Acceptance of leadership, distribution



Note: n=2316, mean = 52.42, std. dev = 18.22, min = 0, max = 100

The distribution of the index is close to normally distributed and shows considerable variation in employee acceptance of leadership.

Perceived performance (only primary schools)

Organizational performance can be conceptualized and measured in various ways. Here we include measures of managers' perceptions of their organization's performance. One argument for doing this is that managers are often able to include a broader set of performance criteria in their evaluations than administrative register data on performance (e.g., Brewer 2005). The items used here are inspired are inspired by Thomas, Walker, and Meier (2011), but were adapted to the Danish school context. Based on Nielsen (2014a), we asked school principals to compare their organization's performance to, respectively, the national average, socio-economically comparable schools, and last year's performance.

Table 74. Perceived performance, items

		Source
l_perperf_genskoler	How would you asses that the students in your school overall performed at the exit exams in 2014 compared to the average of Danish schools? *Hvordan vurderer du, at eleverne på din skole samlet set har klaret sig i afgangsprøverne i 2014 sammenlignet med gennemsnittet af danske skoler?*	Modified from Thomas, Walker, and Meier (2011)
l_perperf_genskoler _lignelev	How would you asses that the students in your school overall performed at the exit exams in 2014 compared to other schools with a similar composition of students? *Hvordan vurderer du, at eleverne på din skole samlet set har klaret sig i afgangsprøverne i 2014 sammenlignet med andre skoler, der har et lignende elevgrundlag?*	Modified from Thomas, Walker, and Meier (2011)

(Table continued on netxt page)

l_perperf_skole1213	How would you asses that the students in your school overall performed at the exit exams in 2014 compared to how the school's students performed in 2012 and 2013. *Hvordan vurderer du, at eleverne på din skole samlet set har klaret sig i afgangsprøverne i 2014 sammenlignet med, hvordan skolens afgangselever klarede sig i 2012 og 2013?*	Modified from Thomas, Walker, and Meier (2011)

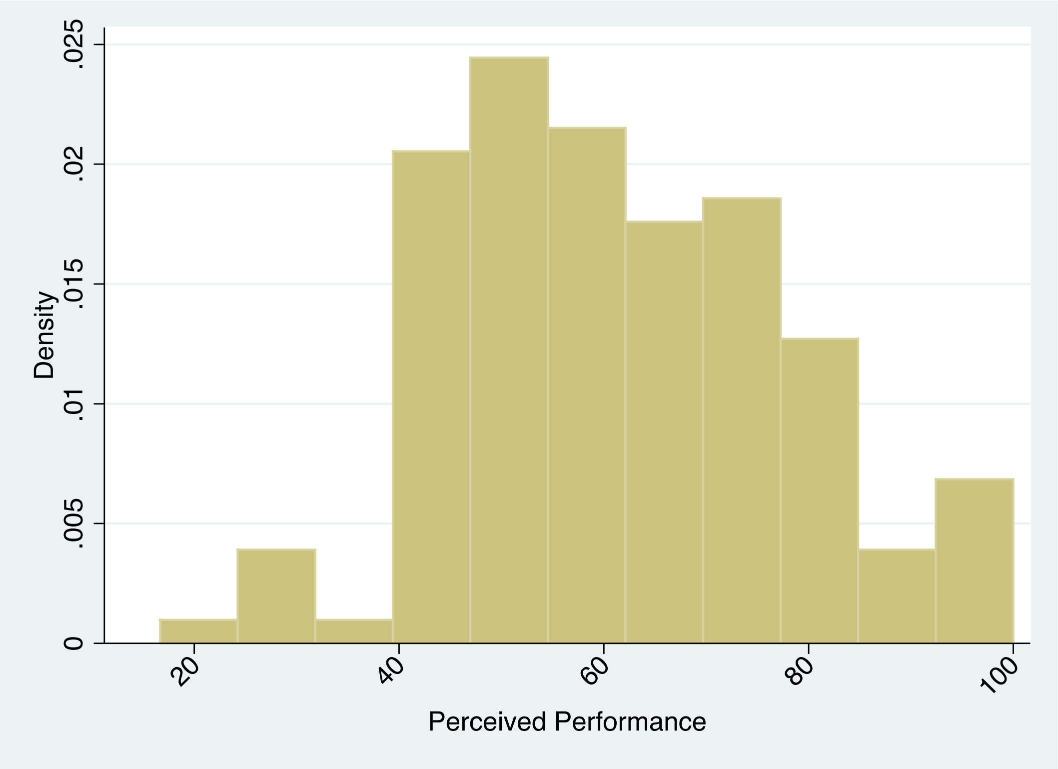
The items can be combined into a formative index, but will not necessarily be related to one common factor. Nevertheless, a factor analysis shows considerable covariation across the three items with all factor loadings at or above 0.58, indicating that managers assess their performance similarly across the three types of comparisons.

Table 75. Factor analysis: Perceived performance

	Loadings
How would you asses that the students in your school overall performed at the exit exams in 2014 compared to the average of Danish schools?	.554
How would you asses that the students in your school overall performed at the exit exams in 2014 compared to other schools with a similar composition of students?	.703
How would you asses that the students in your school overall performed at the exit exams in 2014 compared to how the school's students performed in 2012 and 2013.	.530

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 135. Cronbach's alpha = .647

Figure 58. Perceived performance, distribution



Note: N=135, mean = 61.73 std. dev. = 18.13, min = 16.67, max = 100

The distribution of the index is left skewed, suggesting a tendency for the school principals in the sample to assess their organization's performance as better than the three points of comparison. This does not necessarily show the existence of a biased overly-positive self-assessment of performance (though previous work has found this), as our sample of school principals might not be fully representative for the entire sample of public schools.

School teachers' Working Hour Rules (only primary school teachers) (LBA)

Motivation crowding theory argues that external interventions (incentives and rules) not only have positive price/disciplining effects, but also a motivation crowding effect aimed at intrinsic motivation. This crowding effect can be either negative or positive, and the direction depends on how the intervention is perceived as either controlling or supportive (Frey 1997). If an intervention is seen as supportive, intrinsic motivation is expected to increase (crowded in). However, if an intervention is seen as controlling, intrinsic motivation is harmed (crowded out), and if this effect surpasses the positive price/disciplining effect, performance can actually decrease.

Taking effect from August 2014, the school teachers' working hour rules was changed (Law no. 409, 2013), and we investigate how controlling/supportive the teachers perceive the new rules as an important example of an external intervention. The key inspiration in terms of measurement is a similar study of student plans as another example of rules concerning Danish teachers (Jacobsen et al. 2013). The working hour rules are determined on three level: Nationally, in each municipality and at the school level. We therefore ask the teachers about their perception of the rules (and the implementation of the rules) at these three levels.

Table 76. School teachers' working hour rules, items

	National level	
arbregl_nat1	The new working hour rules signal mistrust in the work I perform *De nye arbejdstidsregler signalerer mistillid til det arbejde, jeg udfører*	Own/modified from Jacobsen et al. 2013
arbregl_nat2	The new working hour rules will help teachers use their work time in an optimal way *De nye arbejdstidsregler vil understøtte lærerne i at udnytte arbejdstiden bedst muligt*	Own/modified from Jacobsen et al. 2013

(table continued on next page)

arbregl_nat3	The new working hour rules are about controlling the employees' work time *De nye arbejdstidsregler handler om at kontrollere medarbejdernes arbejdstid*	Own/modified from Jacobsen et al. 2013
arbregl_nat4	The new working hour rules will enable the teachers to deliver good education *De nye arbejdstidsregler vil give lærerne gode muligheder for at levere god undervisning*	Own/modified from Jacobsen et al. 2013
	Municipal level	
arbregl_kom1	The way in which the municipality implements the new working hour rules signal mistrust in the work I perform *Den måde, kommunen implementerer de nye arbejdstidsregler på, signalerer mistillid til det arbejde, jeg udfører*	Own/modified from Jacobsen et al. 2013
arbregl_kom2	The municipality's use of the new working hour rules will help teachers use their work time in an optimal way *Kommunens brug af de nye arbejdstidsregler understøtter lærerne i at udnytte arbejdstid bedst muligt*	Own/modified from Jacobsen et al. 2013
arbregl_kom3	The municipality uses the new working hour rules to control the employees' work time *Kommunen bruger de nye arbejdsregler til at kontrollere medarbejdernes arbejdstid*	Own/modified from Jacobsen et al. 2013

(Table continued on next page)

arbregl_kom4	The way in which the municipality has implemented the new working hour rules allows the teachers to deliver good education *Kommunens implementering af de nye arbejdstidsregler giver lærerne mulighed for at levere god undervisning*	Own/modified from Jacobsen et al. 2013
	School level	
arbregl_lok1	The way in which my school principal implements the new working hour rules signal mistrust in the work I perform *Den måde, min skoleleder implementerer de nye arbejdstidsregler på, signalerer mistillid til det arbejde, jeg udfører*	Own/modified from Jacobsen et al. 2013
arbregl_lok2	The school principal’s use of the new working hour rules will help teachers use their work time in an optimal way *Skolelederens brug af de nye arbejdstidsregler understøtter lærerne i at udnytte arbejdstiden bedst muligt*	Own/modified from Jacobsen et al. 2013
arbregl_lok3	My school principal uses the new working hour rules to control the employees’ work time *Min skoleleder bruger de nye arbejdsregler til at kontrollere medarbejdernes arbejde*	Own/modified from Jacobsen et al. 2013
arbregl_lok4	The way in which my school principal has implemented the new working hour rules allows the teachers to deliver good education *Skolelederens implementering af de nye arbejdstidsregler giver lærerne mulighed for at levere god undervisning*	Own/modified from Jacobsen et al. 2013

Table 77. Factor analysis: School teachers' working hour rules

	Pretext: ….	Factors		
		1	2	3
National level	The new working hour rules signal mistrust in the work I perform (reversed)	-.336	.595	
	The new working hour rules will help teachers use their work time in an optimal way	.714		
	The new working hour rules are about controlling the employees' work time (reversed)	-.321	.662	
	The new working hour rules will enable the teachers to deliver good education	.753		
Municipal level	The way in which the municipality implements the new working hour rules signal mistrust in the work I perform (reversed)	-.428	.631	
	The municipality's use of the new working hour rules will help teachers use their work time in an optimal way	.768		
	The municipality uses the new working hour rules to control the employees' work time (reversed)	-.360	.656	
	The way in which the municipality has implemented the new working hour rules allows the teachers to deliver good education	.775		
School level	The way in which my school principal implements the new working hour rules signal mistrust in the work I perform (reversed)			.782
	The school principal's use of the new working hour rules will help teachers use their work time in an optimal way	.582		-.491
	My school principal uses the new working hour rules to control the employees' work time (reversed)			.762
	The way in which my school principal has implemented the new working hour rules allows the teachers to deliver good education	.600		-.473

Note: Extraction method: Principal factor analysis with oblimin rotation. Loadings < .3 left blank. R: Code is reversed. Three factors with an Eigenvalue higher than 1 was extracted. N = 1535. Cronbach's alpha for items in factor 1 = .764. Cronbach's alpha for items in factor 2 = .815. Cronbach's alpha for items in factor 3 = .831.

There are considerable cross-loadings in the three different levels, which can be contributed to the wording of the items. Thus, we analyze each dimension separately to prove a common factor on each level.

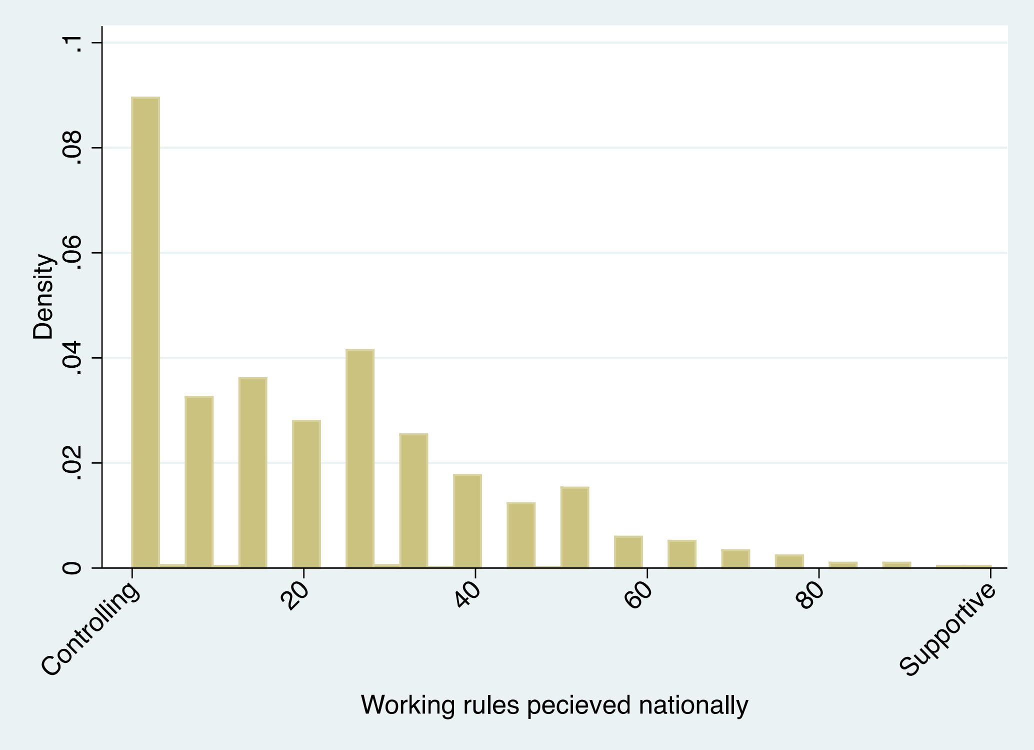
Table 78. Factor analysis: School teachers' working hour rules - National level

	Loadings
The new working hour rules signal mistrust in the work I perform (reversed)	.692
The new working hour rules will help teachers use their work time in an optimal way	-.616
The new working hour rules are about controlling the employees' work time (reversed)	.691
The new working hour rules will enable the teachers to deliver good education	-.657

Note: Reversed: Code is reversed. Extraction method: Principal factor. Only one factor with eigen value higher than 1 was extracted. Cronbach's alpha: 0.764

A factor analysis shows that the 4 items load on a single dimension, and the factor loadings are acceptable, ranging between 0.62 and 0.69. The distribution is very highly right-skewed indicating that teachers perceive the work rules as controlling at the national level.

Figure 59. School teachers' working hour rules - National level, distribution



Note n=1612, mean = 19.78, std. dev = 19.39, min = 0, max = 100

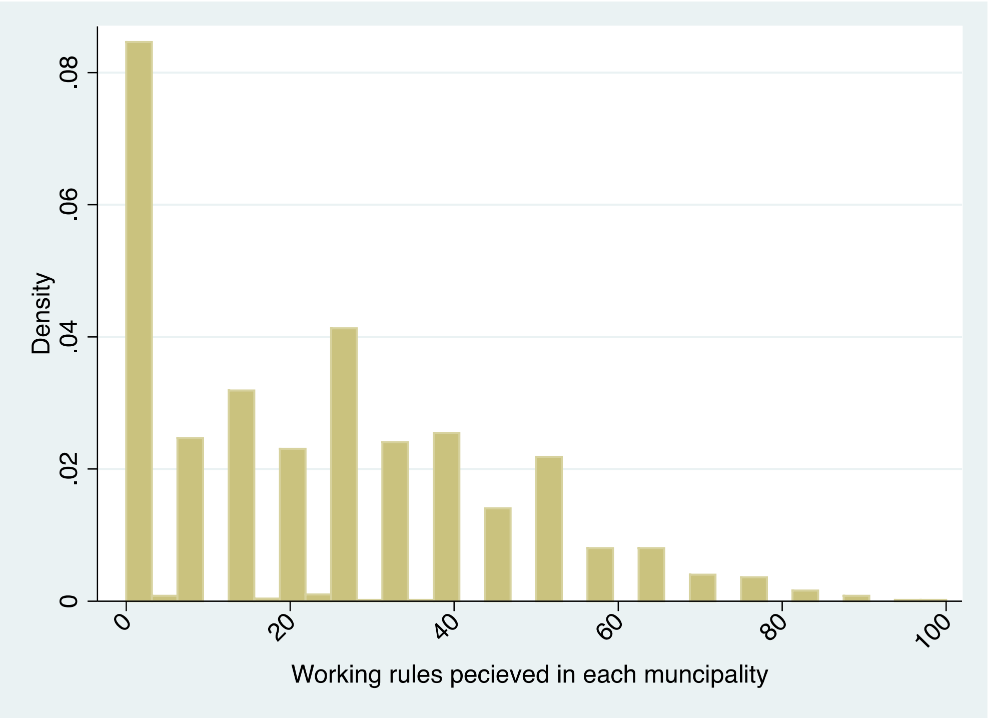
Table 79. Factor analysis: School teachers' working hour rules - Municipal level

	Loadings
The way in which the municipality implements the new working hour rules signal mistrust in the work I perform (reversed)	.777
The municipality's use of the new working hour rules will help teachers use their work time in an optimal way	-.675
The municipality uses the new working hour rules to control the employees' work time (reversed)	.724
The way in which the municipality has implemented the new working hour rules allows the teachers to deliver good education	-.703

Note: Reversed: Code is reversed. Extraction method: Principal factor. Only one factor with eigen value higher than 1 was extracted. Cronbach's alpha: 0,815

A factor analysis shows that the 4 items load on a single dimension, and the factor loadings are acceptable, ranging between 0.68 and 0.77. The distribution is highly right-skewed indicating that teachers perceive the work rules as controlling at the municipal level.

Figure 60. School teachers' working hour rules - Municipal level, distribution



Note: N=1596, mean = 22.56, std. dev = 20.58, min = 0, max = 100

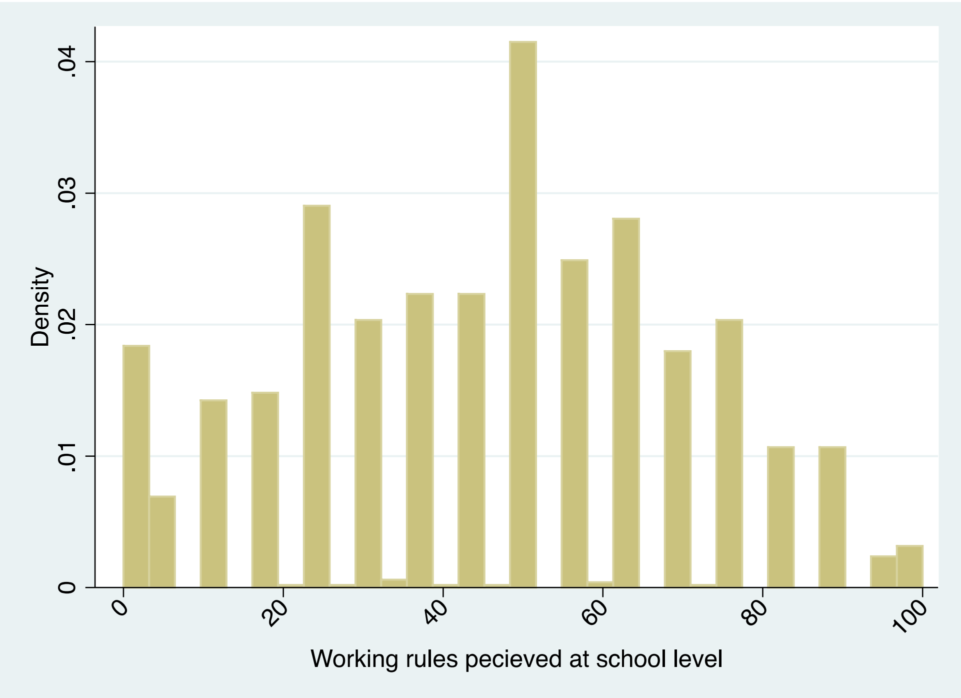
Table 80. Factor analysis: School teachers' working hour rules - School level

	Loadings
The way in which my school principal implements the new working hour rules signal mistrust in the work I perform (reversed)	.784
The school principal's use of the new working hour rules will help teachers use their work time in an optimal way	-.741
My school principal uses the new working hour rules to control the employees' work time (reversed)	.729
The way in which my school principal has implemented the new working hour rules allows the teachers to deliver good education	-.733

Note: Reversed: Code is reversed. Extraction method: Principal factor. Only one factor with eigen value higher than 1 was extracted. Cronbach's alpha: 0,831

A factor analysis shows that the 4 items load on a single dimension, and that the factor loadings are acceptable, ranging between 0.73 and 0.78. The scale approaches normal distribution (mean = 45.49). An edge peak at the lower limit shows that a bulk of teachers perceives the working rules as controlling at the school level.

Figure 61. School teachers' working hour rules - School level, distribution



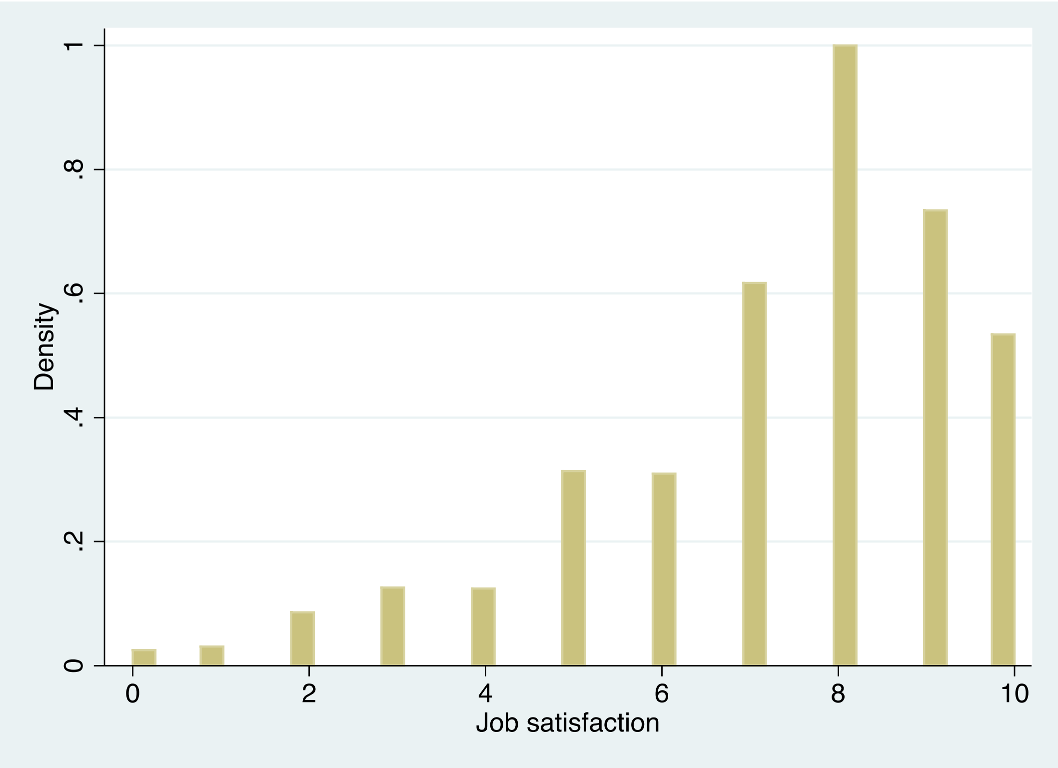
Note: n=1569, mean = 45.49, std. dev = 24.09, min = 0, max = 100

Job satisfaction (CBJ)

Job satisfaction concerns how an individual generally feels about his or her job in general or in relation to specific aspects and is defined as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (Locke (1976) cited in Vandenabeele, 2009: 14). Job satisfaction has been measured in a number of different ways and have been both generally focused on enjoyment, interest, and enthusiasm to tap general feelings or specifically focused on particular facets of the job such as the company or the leader (see Rainey 2014 for an overview). We are mainly interested in the general aspects of job satisfaction, and since several studies have found high correlations between general and specific measures of job satisfaction, we apply a widely used single item measure.

	Job satisfaction	Source
jsa	All in all on a scale from 0 to 10, how satisfied are you with your current job? *Samlet set på en skala fra 0 til 10, hvor tilfreds er du med dit nuværende job?*	

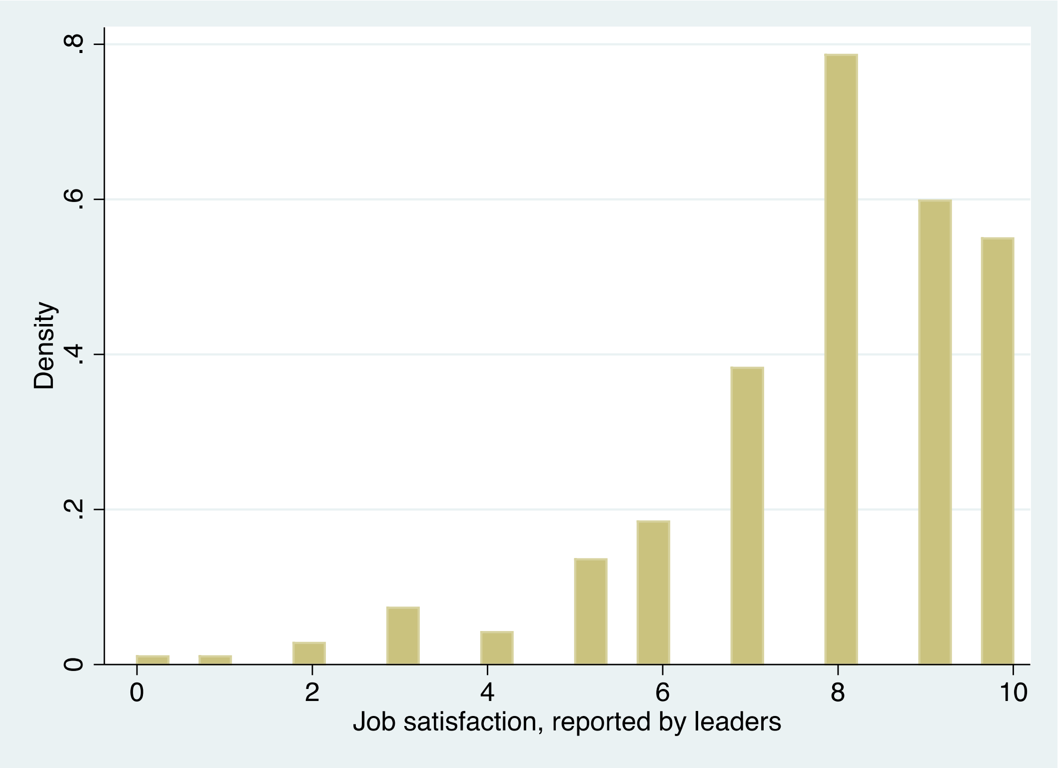
Figure 62. Job satisfaction reported by employees, distribution



Note: n=9160, mean = 7.38, std. dev = 2.11, min = 0, max = 10

The job satisfaction of the surveyed employees is fairly high with a mean satisfaction of 7.38.

Figure 63. Job satisfaction reported by leaders, distribution



Note: N=805, mean = 7.89, std. dev = 1.87, min = 0, max = 10

The job satisfaction of the surveyed leaders is fairly high with a mean satisfaction of 7.89 and also somewhat higher than the job satisfaction of the employees.

Autonomy (PAN)

The following four items concern different aspects of organizational autonomy, but with particular focus on the level of managerial authority over different aspects. The items concern, respectively, managerial authority over hiring, firing, and resource allocation, as well as organizational autonomy over internal organization. These distinctions are described by Verhoest et al. (2004) and, for instance, used by Nielsen (2014b), and were inspired by item constructions in Andersen (2006).

Table 81. Autonomy, items

		Source
l_aut1	As a manager I have considerable freedom to decide on which employees to hire *Som leder har jeg stor frihed til at bestemme, hvilke medarbejdere vi skal ansætte*	Andersen (2006)
l_aut2	As a manager I have considerable freedom to decide on which employees to fire *Som leder har jeg stor frihed til at bestemme, hvilke medarbejdere vi skal afskedige*	Andersen (2006)
l_aut3	As a manager I have considerable freedom to allocate our resources within our [organization type] *Som leder har jeg stor frihed til at fordele vores ressourcer inden for [organisationstype]*	Andersen (2006)
l_aut4	My [organization type] is free to decide how we organize our work *Mit [organisationstype] er fri til selv at bestemme, hvordan vi organiserer vores arbejde*	Andersen (2006)

The items can be combined into a formative index, but will not necessarily be related to one common factor. Nevertheless, a factor analysis shows considerable covariation across the four items with all factor loadings at or above 0.60, indicating that empirically different dimensions of autonomy are positively correlated.

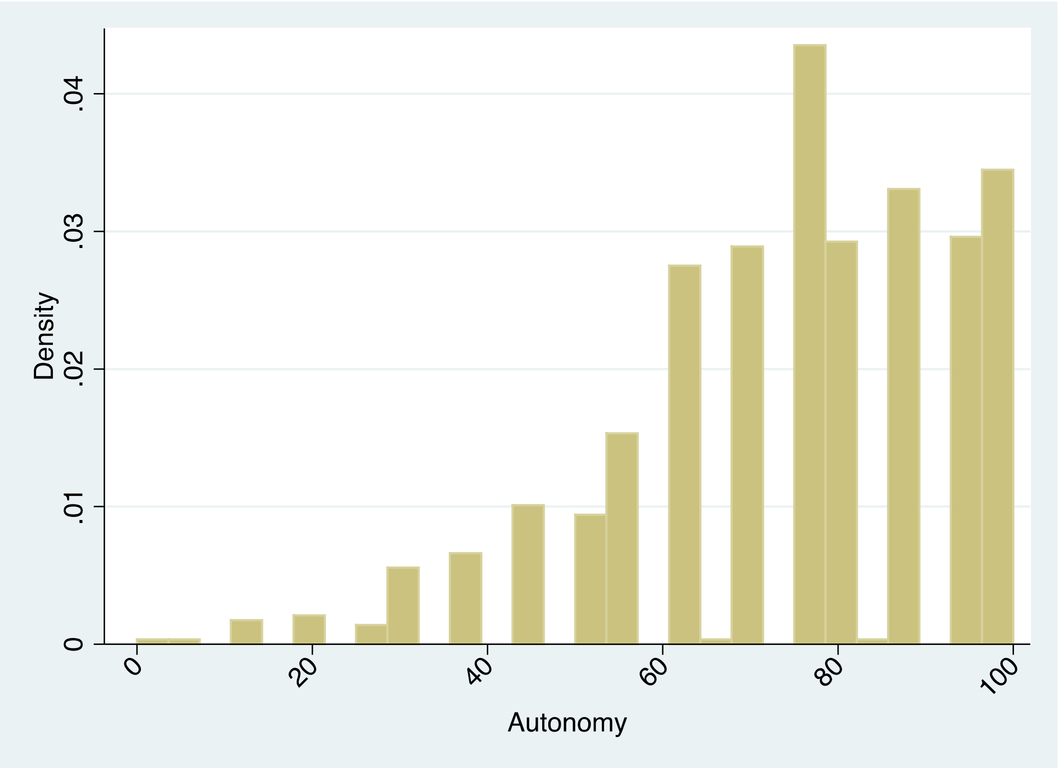
Table 82. Factor analysis: Autonomy

	Loadings
As a manager I have considerable freedom to decide on which employees to hire	.617
As a manager I have considerable freedom to decide on which employees to fire	.608
As a manager I have considerable freedom to allocate our resources within our organization	.626
My organization is free to decide how we organize our work	.617

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 798. Cronbach's alpha = .724

The distribution of the index is left skewed, suggesting that most managers in the sample possess significant degrees of freedom.

Figure 64. Autonomy, distribution



Note: n=804, mean = 74.36 std. dev. = 19.40, min = 0, max = 100

Affectivity (TME)

Affectivity refers to a personality trait of an individual. Normally one distinguishes between negative and positive affectivity. People with high negative affectivity (NA) view themselves and aspects of the world negatively. NA roughly corresponds to the personality factor of anxiety/neuroticism. Positive affectivity (PA) on the other hand refers to how people experience positive emotions. It roughly corresponds to the extraversion personality factor (Costa and McCrae, 1980). Both measures of affectivity are believed to be fairly stable over time, and having high NA does not imply low PA and vice versa (Watson and Clark, 1984). We use the high-activation pleasant affect (HAPA) and low-activation unpleasant affect (LAUA) scales from Warr et al. (2014) to measure positive and negative affectivity.

Table 83. Affectivity, items, employees and leaders

	HAPA	
panas1, l_panas1	Enthusiastic *Entusiastisk*	Warr et al. 2014
panas2, l_panas2	Excited *Begejstret*	Warr et al. 2014
panas3, l_panas3	Inspired *Inspireret*	Warr et al. 2014
panas4, l_panas4	Joyful *Glad*	Warr et al. 2014
	LAUA	
panas5, l_panas5	Dejected *Nedslået*	Warr et al. 2014
panas6, l_panas6	Depressed *Deprimeret*	Warr et al. 2014
panas7, l_panas7	Despondent *Mismodig*	Warr et al. 2014
panas8, l_panas8	Hopeless *Fortvivlet*	Warr et al. 2014

A principal factor analysis suggests two factors. As seen below the variables load on the HAPA and LAUA scales as expected suggesting the theorized factor structure in both the employee and leader sample.

Table 84. Factor analysis: Affectivity, Employees

	Factor 1	Factor 2
Enthusiastic	.775	
Excited	.806	
Inspired	.752	
Joyful	.636	-.375
Dejected		.756
Depressed		.707
Despondent		.732
Hopeless		.613

Note: Extraction method: principal factor analysis with varimax rotation. Loadings < .3 left blank. Two factors with an Eigenvalue higher than 1 was extracted. N = 2017

Table 85. Factor analysis: Affectivity, Leaders

	Factor 1	Factor 2
Enthusiastic	.827	
Excited	.867	
Inspired	.759	
Joyful	.643	-.339
Dejected		.778
Depressed		.738
Despondent		.774
Hopeless		.667

Note: Extraction method: principal factor analysis with varimax rotation. Loadings < .3 left blank. Two factors with an Eigenvalue higher than 1 was extracted. N = 592

LAUA

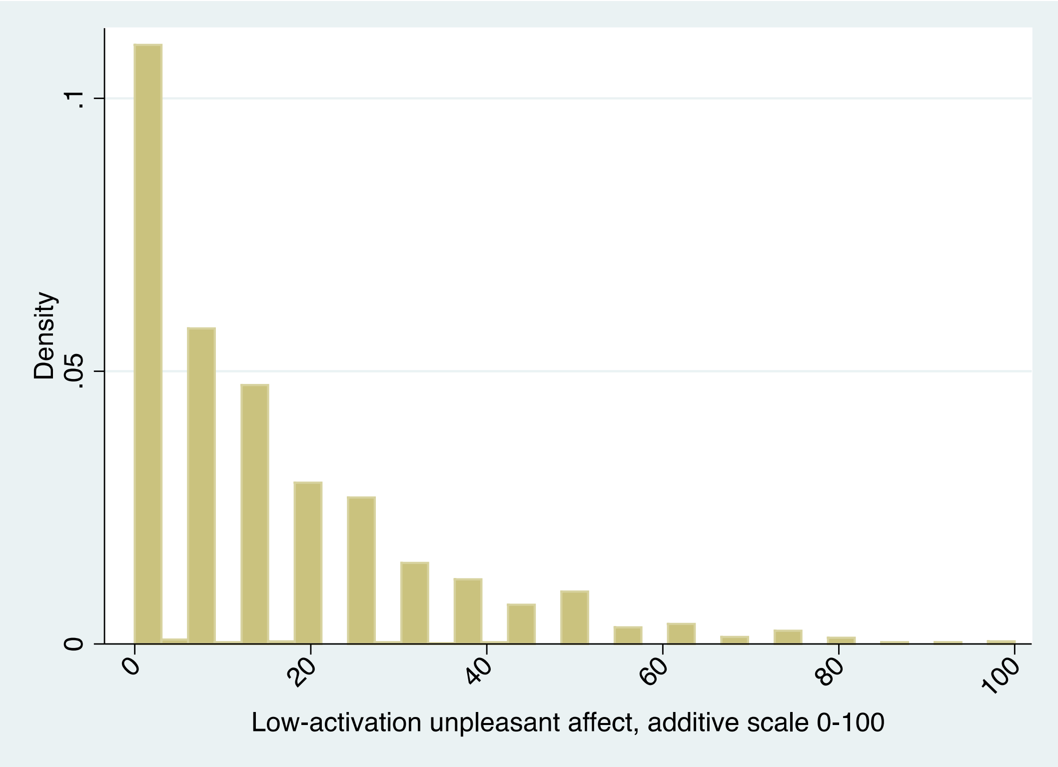
A factor analysis was carried out using principal factor analysis on the items belonging to the underlying LAUA construct. Cronbach's Alpha is .823.

Table 86. Factor analysis: LAUA, employees

	Loadings
Dejected	.794
Depressed	.718
Despondent	.770
Hopeless	.651

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N = 2047. Cronbach's alpha = .823.

Figure 65. LAUA, distribution, employees



n=2065, mean = 14.52 std. dev. = 17.26, min = 0, max = 75

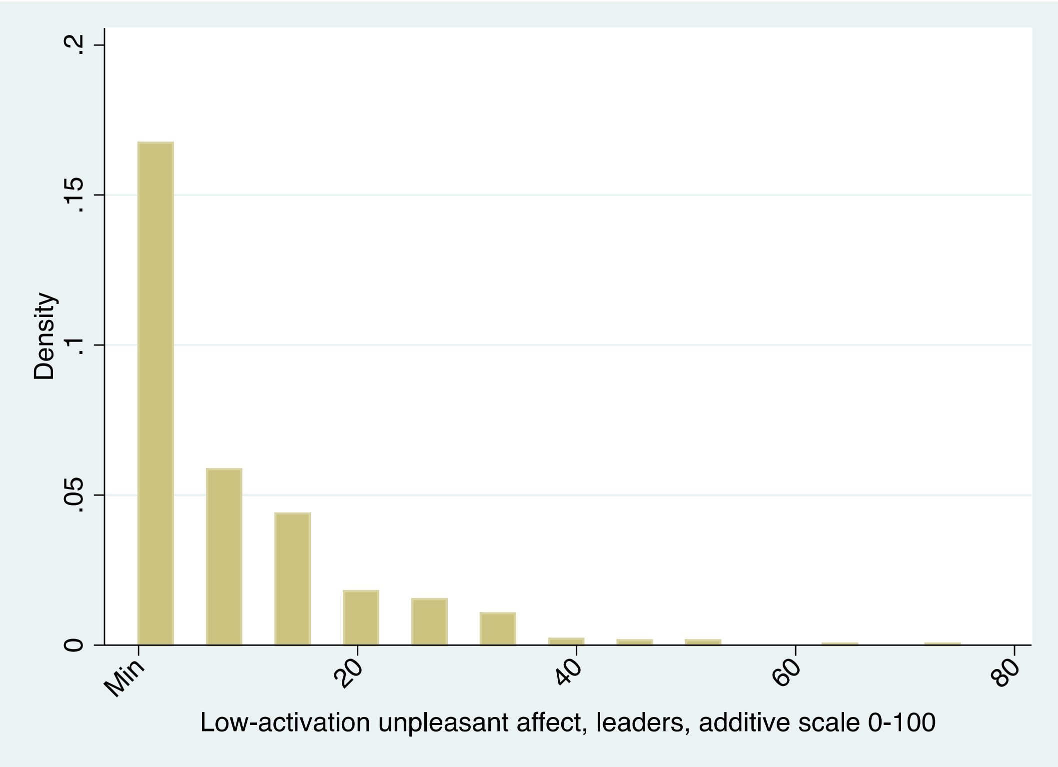
The distribution of the index is highly right-skewed indicating the employees report low level of low-activation unpleasant affect.

Table 87. Factor analysis: LAUA, leaders

	Loadings
Dejected	.657
Depressed	.612
Despondent	.651
Hopeless	.533

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N =.599 Cronbach's alpha = .712.

Figure 66. LAUA, distribution, leaders



n=606, mean = 7.10 std. dev. = 10.36, min = 0, max = 75

The distribution of the index is highly right-skewed indicating the leaders report low level of low-activation unpleasant affect.

HAPA

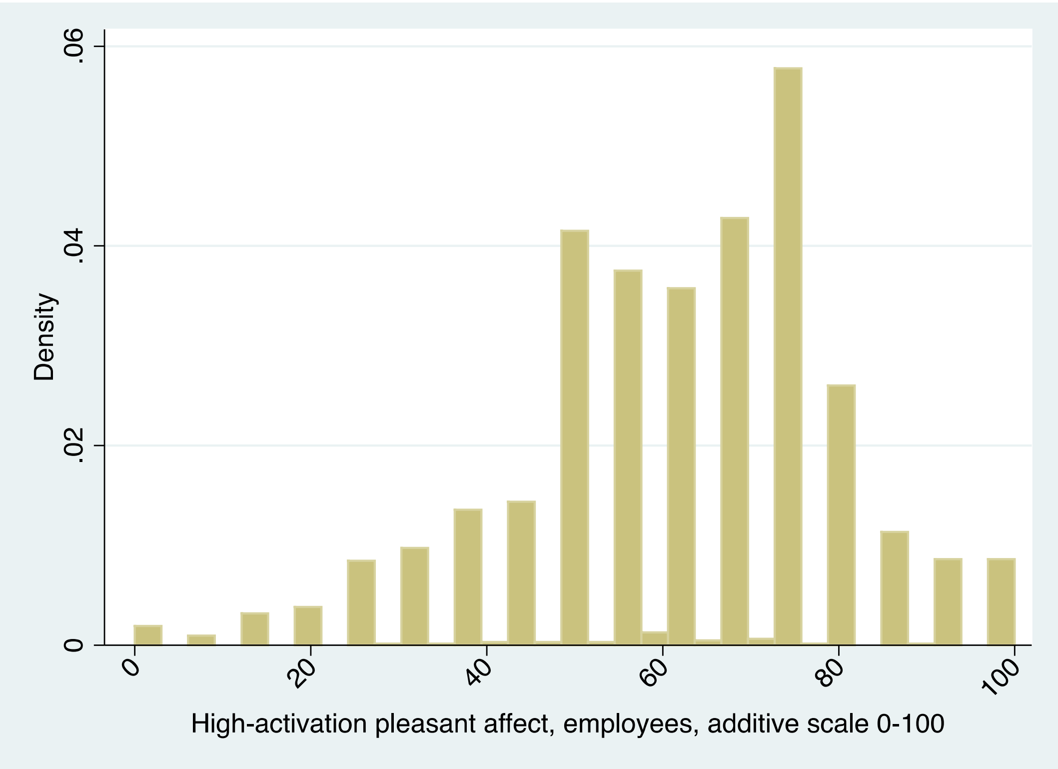
Similarly a factor analysis was carried out using principal factor analysis on the items belonging to the underlying HAPA construct for employees and leaders.

Table 88. Factor analysis: HAPA, employees

	Loadings
Enthusiastic	.793
Excited	.833
Inspired	.783
Joyful	.702

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N = 2036. Cronbach's alpha = .872

Figure 67. HAPA, distribution, employees



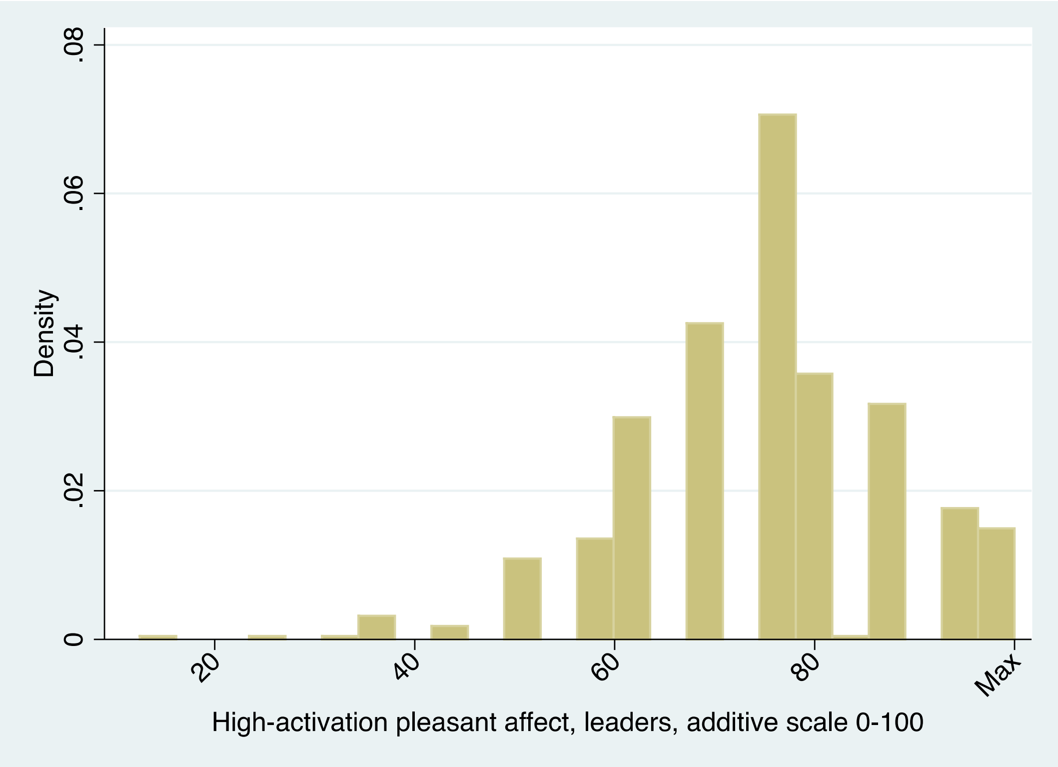
n=2064, mean = 62.05 std. dev. = 18.83, min = 0, max = 100

Table 89. Factor analysis: HAPA, leaders

	Loadings
Enthusiastic	.708
Excited	.796
Inspired	.652
Joyful	.578

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N = 598. Cronbach's alpha = .793

Figure 68. HAPA, distribution, leaders



n=606, mean = 74.69 std. dev. = 13.48, min = 12.5, max = 100

Bullying in the workplace (TME)

Bullying is defined as a situation where a person is repeatedly, over a longer period of time, subject to negative actions from which he or she finds it difficult to defend him- or herself (e.g. Hansen 2011).

Bullying is usually measured in two ways, either by asking the respondent how often he or she has been bullied according to the definition above within the past 6 months, which is often referred to as the subjective measure, or via the negative acts questionnaire – revised (NAQ-R) (Einersen et al. 2009). The NAQ-R comprises of 22 items measuring different negative actions such as "Someone withholding information, which affects your performance", "Being humiliated or ridiculed in connection with your work", "Being ignored or excluded". The respondents are asked how often they have been exposed to the negative actions ("Never", "Now and then", "Monthly", "Weekly", or "Daily") within the past 6 months. There are two ways of identifying a victim as a target of bullying in the literature. Either an individual is considered a target of bullying if he or she is exposed to at least one negative action daily or weekly within the past six months, or if he or she is exposed to at least two negative acts daily or weekly. In our survey we include the new short version of the NAQ-R. It comprises of 9 of the original 22 negative actions. As it is completely new and hasn't been validated yet we construct two variables for being bullied: whether an individual is subject to at least one negative act (bullied_naq1), and whether an individual is subject to at least two negative acts (bullied_naq2) weekly or daily.

Table 90. The Negative Acts Questionnaire – Short, items, employees and leaders

	NAQ-S	
naqr1, l_naqr1	Someone withholding information which affects your performance *At nogen tilbageholder information, som påvirker din arbejdsindsats*	NAQ-S
naqr2, l_naqr2	Spreading of gossip and rumours about you *At der bliver spredt sladder og rygter om dig*	NAQ-S
naqr3, l_naqr3	Being ignored, excluded or being “sent to Coventry” (being ostracised) *At blive ignoreret, udelukket fra eller frosset ude af det sociale fællesskab*	NAQ-S
naqr4, l_naqr4	Having insulting or offensive remarks made about your person (i.e. habits and background), your attitudes or your private life *At nogen fornærmer eller håner dig som person (f.eks. dine vaner og baggrund), dine holdninger eller dit privatliv*	NAQ-S
naqr5, l_naqr5	Being shouted at or being the target of spontaneous anger (or rage) *At blive råbt af eller blive mål for spontan vrede (eller raserianfald)*	NAQ-S

(table continued on next page)

naqr6, l_naqr6	Repeated reminders of your errors or mistakes *Gentagne gange at blive mindet om dine fejltagelser eller "bommerter"*	NAQ-S
naqr7, l_naqr7	Being ignored or facing a hostile reaction when you approach *At blive ignoreret eller mødt med fjendtlighed, når du henvender dig til andre*	NAQ-S
naqr8, l_naqr8	Persistent criticism of your work and effort *Vedvarende kritik af dit arbejde og din indsats*	NAQ-S
naqr9, l_naqr9	Practical jokes carried out by people you don't get on with *Grov spøg fra folk, som du ikke kommer så godt ud af det med*	NAQ-S

Factor Analysis: NAQ-S: Employees

A principal component analysis suggests a one 1 factor solution. The principal factor analysis suggests 4 factors however the loadings are not high or have an obvious structure across factors. We therefore extract one factor using a principal factor model. KMO: 0.874. Cronbach's alpha 0.783.

Table 91. Factor analysis: The Negative Acts Questionnaire – Short, employees

	Loadings
Someone withholding information which affects your performance	.464
Spreading of gossip and rumours about you	.621
Being ignored, excluded or being "sent to Coventry" (being ostracised)	.569
Having insulting or offensive remarks made about your person (i.e. habits and background), your attitudes or your private life	.602
Being shouted at or being the target of spontaneous anger (or rage)	.464
Repeated reminders of your errors or mistakes	.532
Being ignored or facing a hostile reaction when you approach	.601
Persistent criticism of your work and effort	.538
Practical jokes carried out by people you don't get on with	.580

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue higher than 1 was extracted. N = 2023. Cronbach's alpha = .783

The factor analysis thus suggests that the questions measure a common construct, which we will refer to as bullying. As mentioned above two different measures of bullying was constructed.

Table 92. Measures of bullying, employees

	Mean	No. Obs.
Exposed to at least one negative action daily or weekly within the past 6 months	6.3%	2,025
Exposed to at least two negative action daily or weekly within the past 6 months	1,6%	2,025

Factor Analysis: NAQ-S: Leaders

A principal component analysis suggests a two factor solution, however it produces a lot of cross loadings. A screeplot suggests a one factor solution. We therefore extract one factor using a principal factor model. Cronbach's alpha is 0.771.

Table 93. Factor analysis: NAQ-S, Leaders

	Loadings
Someone withholding information which affects your performance	.483
Spreading of gossip and rumours about you	.616
Being ignored, excluded or being "sent to Coventry" (being ostracised)	.565
Having insulting or offensive remarks made about your person (i.e. habits and background), your attitudes or your private life	.523
Being shouted at or being the target of spontaneous anger (or rage)	.462
Repeated reminders of your errors or mistakes	.470
Being ignored or facing a hostile reaction when you approach	.640
Persistent criticism of your work and effort	.666
Practical jokes carried out by people you don't get on with	.393

Note: Extraction method: Principal factor analysis. One factor with an Eigenvalue over 1 was extracted. N = 594. Cronbach's alpha = .771

The factor analysis thus suggests that the questions measure a common construct which we will refer to as bullying.

Table 94. Measures of bullying, leaders

	Mean	No. Obs.
Exposed to at least one negative action daily or weekly within the past 6 months	3.54%	594
Exposed to at least two negative action daily or weekly within the past 6 months	1.35%	594

Subjective measures of bullying.

The respondents where presented with the definition of bullying and then asked to state how often they had been exposed to bullying according to the definition within the past six months. Bullying is defined as a situation where a person is repeatedly, over a longer period of time, subject to negative actions in relation to his or hers work from which he or she finds it difficult to defend him- or herself. Have you experienced bullying within the past 6 months?

Table 95. Subjective measures of bullying, distribution, employees, percent

	Never	Now & then	Monthly	Weekly	Daily	N
Subject to bullying *Været udsat for mobning*	95.42	3.95	0.34	0.19	0.10	2,075
Witnessed bullying *Været vidne til, at en person er blevet mobbet*	79.86	18.12	1.20	0.43	0.39	2,075
Bullied others *Selv mobbet eller været med til at mobbe andre*	96.39	3.46	0.05	0	0.06	2,075

Table 96. Subjective measures of bullying, distribution, leaders, percent

	Never	Now & then	Monthly	Weekly	Daily	N
Subject to bullying	97.85	1.49	0.17	0.17	0.33	604
Witnessed bullying	80.79	17.72	1.32	0.17	0	602
Bullied others	98.51	1.49	0	0	0	602

Who bullied?

If an individual responded “Now and then”, “Monthly”, “Weekly” or “Daily” we investigate who they reported as the perpetrators:

Table 97. Who bullied, distribution, employees

	Mean	No. Obs
Closest leader *Din nærmeste leder*	15%	80
Top Management *Den øverste ledelse*	9%	80
Colleagues *Kollegaer*	60%	80
Subordinates *Underordnede*	5%	80
Customers/clients *Kunder/klienter*	3%	80
Students *Elever/studerende*	11%	80
Relatives to students *Pårørende til elever/studerende*	3%	80
Other *Andre*	4%	80

Table 98. Who bullied, distribution, leaders

	Mean	No. Obs
Closest leader	100%	3
Top Management	0%	3
Colleagues	0%	3
Subordinates	0%	3
Customers/clients	0%	3

Students	0%	3

Exposure to bullying

We identify a person as exposed to bullying according to the subjective measure of bullying if he or she responds that he or she has been subject to bullying weekly or daily within the past 6 months.

Table 99. Exposure to bullying within the last six months, employees

	Mean	No. Obs.
Exposed to bullying	0.3 %	2,077

Table 100. Exposure to bullying within the last six months, leaders

	Mean	No. Obs.
Exposed to bullying	0.5%	602

Previous exposure to bullying:

Table 101. Previous exposure to bullying, employees

	Mean	No. Obs.
Have you previously been exposed to bullying?	32.5 %	2,077

Table 102. Previous exposure to bullying, leaders

	Mean	No. Obs.
Have you previously been exposed to bullying?	31.12%	604

Work load (ALH)

[TO BE ADDED]

Social support (ALH)

[TO BE ADDED]

Work engagement (ALH)

[TO BE ADDED]

Cynicism (ALH)

[TO BE ADDED]

Organizational culture: Developmental culture (PAN/AB)

Edgar Schein (1985) has defined culture as a pattern of basic assumptions – invented, discovered or developed by a given group as it learns to cope with its problems of external adaptation and internal integration – that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems. Put differently, organizational culture is "the set of shared, taken-for-granted implicit assumptions that a group holds and that determines how it perceives, thinks about and reacts to its various environments" (Schein 1996). Organizational culture is generally considered to be one of the most significant factors in bringing about organizational change. There is little agreement as to how culture should be conceptualized, and a large number of instruments for exploring and assessing organizational culture exists (see e.g. Jung et al. 2009).We focus here on only one aspect, namely 'Developmental Culture'.

The original scale for measuring organizational culture was developed by Zammuto and Krakower (1991). Later in the public administration literature, the original scale has been transformed into Likert-scaled items (Moynihan, Pandey and Wright 2012). This new scale consists of three items that each contain two statements. To clarify the scale, we split each of the items from Moynihan, Pandey and Wright (2012) into two items based on the contained sentences. Leaving out one redundant sentence, we ended up with a new 5-item scale.

Table 103. Organizational culture, items

	Employees	Source(s)
orgculture1	My department is a very dynamic and entrepreneurial place *Min organisation er et meget dynamisk og innovativt sted*	Moynihan, Pandey and Wright (2012)
orgculture2	People are willing to stick their necks out and take risks *Folk i min organisation er generelt villige til at afprøve nye og risikable tiltag*	Moynihan, Pandey and Wright (2012)

orgculture3	The glue that holds my department together is a commitment to innovation and development *Det, der binder os sammen i min organisation, er vores fokus på innovation og udvikling*	Moynihan, Pandey and Wright (2012)
orgculture4	There is an emphasis on being the best *I min organisation er der stort fokus på at være de bedste*	Moynihan, Pandey and Wright (2012)
orgculture5	Readiness to meet new challenges is important *Vilje til at imødekomme nye udfordringer anses for at være vigtig i min organisation*	Moynihan, Pandey and Wright (2012)

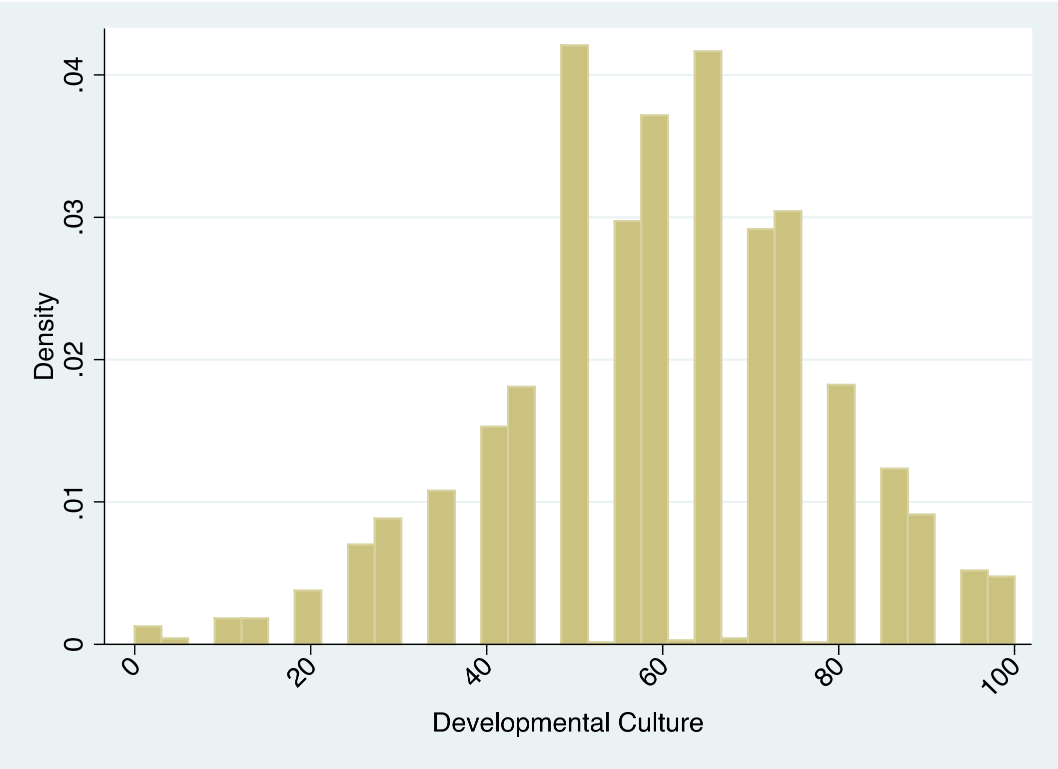
Table 104. Factor analysis: Organizational culture

	Loadings
My department is a very dynamic and entrepreneurial place	.793
People are willing to stick their necks out and take risks	.670
The glue that holds my department together is a commitment to innovation and development	.737
There is an emphasis on being the best	.551
Readiness to meet new challenges is important	.629

Note: Reversed: Code is reversed. Extraction method: Principal factor. Only one factor with Eigenvalue higher than 1 was extracted. N = 2324. Cronbach's alpha: .814

A factor analysis shows that the 5 items load on a single dimension, and the factor loadings are acceptable, ranging between 0.55 and 0.79.

Figure 69. Organizational culture, distribution



Note: n=2353, mean = 59.79, std. dev = 17.98, min = 0, max = 100

The distribution of the index is close to normally distributed and shows considerable variation in perceptions of organizational culture.

Internal communication performance (HHS)

Items measuring internal communication is from a validated index used by Pandey and Garnett (2006) and Moynihan, Wright and Pandey (2012). Themindex is theoretically inspired by the by Katz and Kahn (1966) who argues that, "…communication – the exchange of information and the transmission of meaning – is the very essence of a social system or an organization." (223). They point to the importance of communication flows (both downward, horizontal and upward) in internal communication (235) and all three directions are therefore reflected in the index below.

Table 105. Internal communication performance, items

	Internal communication performance	
comculture1	Downward communication of task performance directives and instructions is adequate. *Ledelsens kommunikation nedad i organisationen, om, hvordan vi løser vores opgaver, er tilstrækkelig*	Pandey & Garnett (2006)
comculture2	Downward communication about the agency's strategic direction is adequate *Ledelsens kommunikation nedad i organisationen om organisationens strategiske retning er tilstrækkelig*	Pandey & Garnett (2006)
comculture3	Downward communication about feedback on work performance is adequate *Ledelsens kommunikation med feedback om, hvor godt vi løser vores opgaver, er tilstrækkelig*	Pandey & Garnett (2006)
comculture4	Upward communication about problems that need attention is adequate *Ledelsens kommunikation opad i organisationen om problemer, vi skal være opmærksom på, er tilstrækkelig*	Pandey & Garnett (2006)
comculture5	Lateral communication giving emotional support to peers is adequate *Kommunikation på tværs i organisationen, hvor vi udtrykker støtte til hinanden på tværs i organisationen, er tilstrækkelig*	Pandey & Garnett (2006)

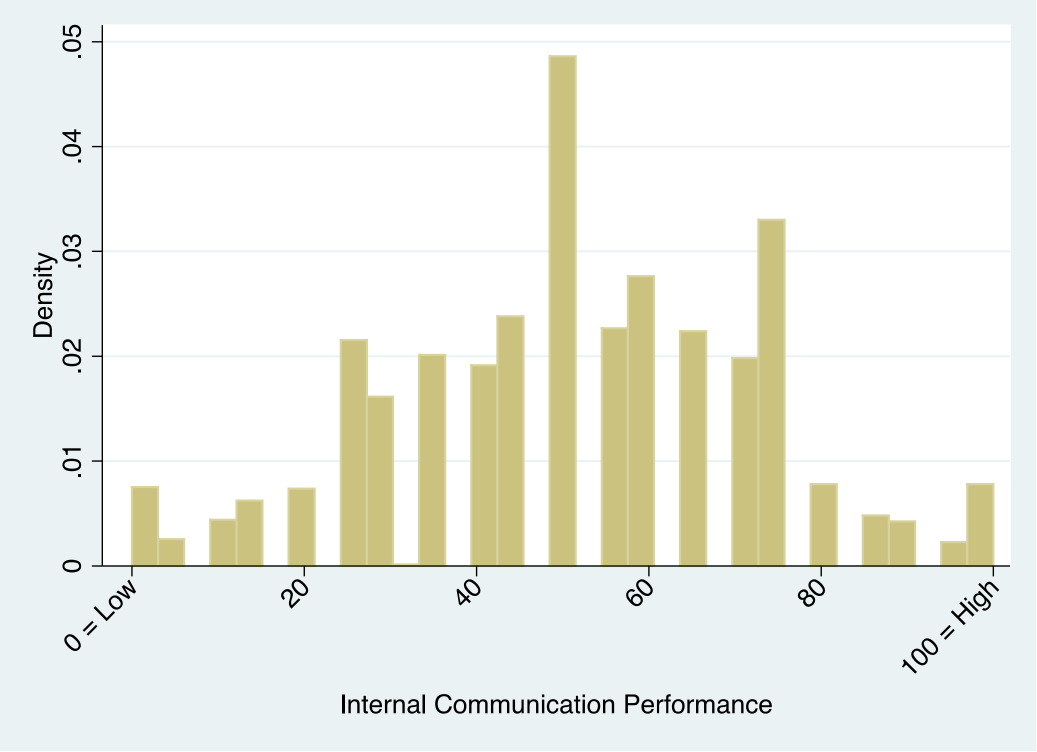
Table 106. Factor analysis: Internal communication performance

	Loadings
Downward communication of task performance directives and instructions is adequate.	.870
Downward communication about the agency's strategic direction is adequate	.824
Downward communication about feedback on work performance is adequate	.823
Upward communication about problems that need attention is adequate	.721
Lateral communication giving emotional support to peers is adequate	.684

Note: Reversed: Code is reversed. Extraction method: Principal factor. Only one factor with eigen value higher than 1 was extracted. Cronbach's alpha: .894

A factor analysis shows that the 5 items load on a single dimension, the factor loadings are acceptable, ranging between 0.684 and 0.870. The alpha value (.89) shows good internal reliability.

Figure 70. Internal communication performance, distribution



Note: N=2329, mean = 51.31, std. dev = 21.50, min = 0, max = 100

The distribution of internal communication performance approaches a normal distribution. A couple of peaks are identified on either side of the mean value of 51.31.

Sickness Absence and Presenteeism (TME)

Sickness absence can be obtained through several channels, both through self-reported measures, employer registers and national registers. Self-reported measures are believed to contain most measurement error whereas sickness absence obtained from registers is believed to contain the least measurement error. However there are some things to note when using register variables on sickness absence.

In Denmark, and hence in our data, sickness absence is obtained through the DREAM registers. Here sickness absence is measured from day one for public sector employees and the unemployed receiving unemployment benefits from the municipality (Dream only registers benefits covered by the municipality). If a person is employed in the private sector the right to wage during sick leave depends on the contract. However, the employer is in any case obliged to pay the equivalent of sickness benefits in the first 4 weeks of absence. Afterwards the municipality will cover the payments equal to the amount of sickness benefits (about $700/week in 2013). For this reason only sickness absence durations of more than four weeks will appear in the data for individuals employed in the private sector, and they will appear from the first day of absence. For private sector employees we can therefore not observe short-term absence (absence less than four weeks), which is why we rely on self-reported measures to obtain this information, realizing that they may contain more measurement error. In order to minimize recollection bias we ask the individuals to state how many work days they have been off ill within the past month.

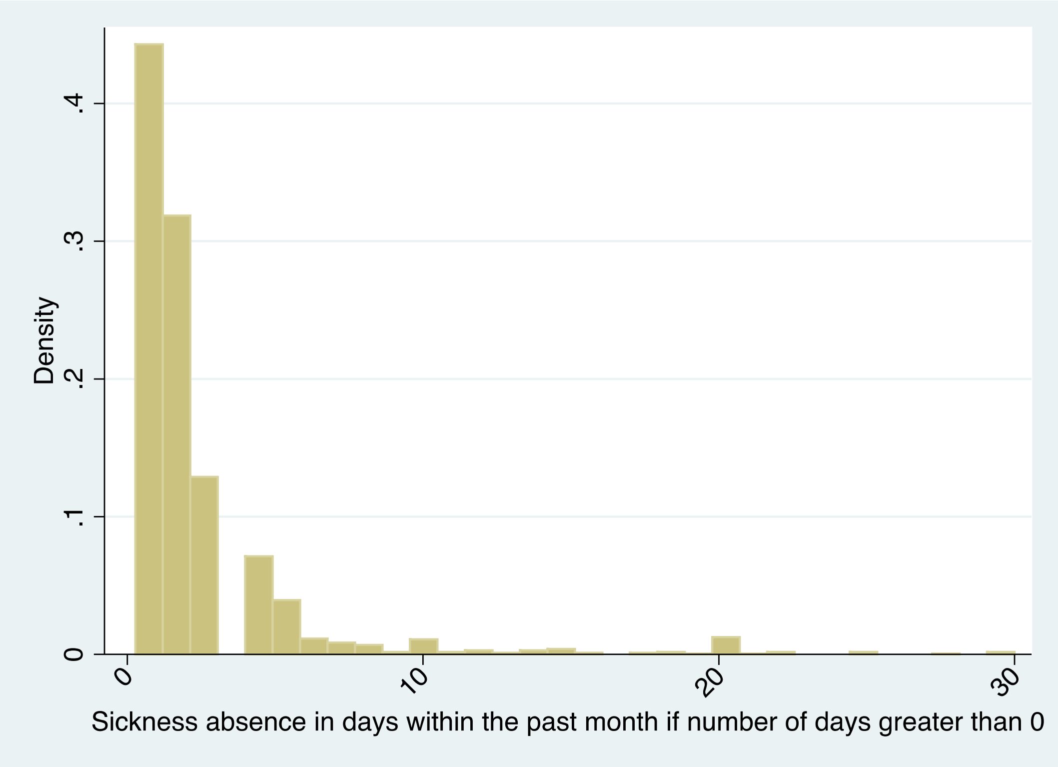
More recently psychologists and sociologists have addressed the phenomenon of presenteeism. Presenteeism refers to the incident where a person attends work even though he or she is ill. This is for obvious reasons not available through registers, which is why we rely on the survey questionnaire to shed light on this aspect of behavior in case of illness. We ask the respondents how many days they went to work although they were ill within the past month.

8 individuals responded that they had more than 31 sick days in the past month. In the analysis below these have been set to missing, however in the distributed data these have not been changed. 9 individuals reported more than 31 days of presenteeism, again these are set equal to missing in the analysis below. We only asked employees about sickness and presenteeism.

Table 107. Sickness absence and presenteeism, descriptive statistics

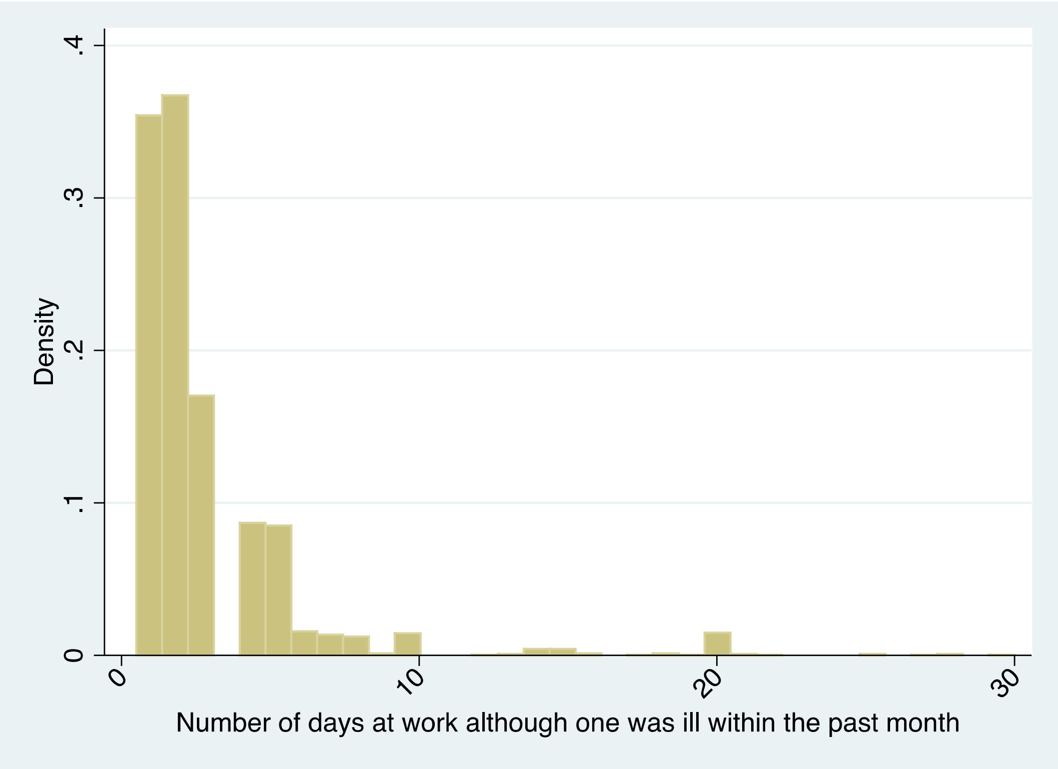
		Mean	Std. Dev.	Min	Max	No. Obs.
Absence	How many work days have you been off ill within the past month? *Hvor mange arbejdsdage har du været fraværende fra arbejde grundet sygdom inden for de seneste fire arbejdsuger (dvs. også før sommerferien, medmindre du allerede har været tilbage i fire uger)?*	0.566	1.905	0	30	9002
Presenteeism	How many days did you go to work although you were ill within the past month? *Hvor mange arbejdsdage er du gået på arbejde, selvom du var syg, inden for de seneste fire arbejdsuger (dvs. eventuelt også før sommerferien)?*	0.902	2.223	0	30	8900

Figure 71. Sickness absence, distribution



The majority of the employees who report absence are ill for 1-2 days.

Figure 72. Presenteeism, distribution



The majority of the employees who report presenteeism are ill for 1-2 days.

Subjective performance (ALH)

[TO BE ADDED]

Preferences for leader style (JL)

As a part of the project, a subsample of 1503 respondents was asked four questions about their preferences for leader styles. Of these 16 respondents did not answer all four preferences questions. These respondents are disregarded in the following analysis. This gives a sample of respondents, who have answered all preferences questions of 1487 respondents.

The preferences were elicited by asking each respondent to choose between leaders with different leader style. This approach is inspired by the work by Luce and Turkey (Luce and Turkey 1964) and the work in conjoint analysis in the marketing literature in the 1970's (Green and Rao 1971; Green and Srinivasan 1978) and the subsequently developed economic valuation method Choice Experiment (Louviere and Woodworth 1983). The method has been used to assess a broad range of non-market goods, ranging from environmental, energy, health and publicly provided service goods (Propper 1990; Adamowicz, Louviere et al. 1994; Train 1998). Theoretically, the methods relates to the work of Lancaster (1966) and Rosen (1974) who argue that it is the attribute of goods that drive demand and not the good itself. In this line of thinking, the preferences for leaders are not related to the leader as such, but on which leader attributes/leader styles the leader have. In this light we elicit preferences for the four following leader attributes.

1) How often the leader expresses a clear the vision of the organization and retains the employees focus on joined goals
2) How often the leader rewards employees, who perform as required
3) How often the leader only retains the employees' focus on joined goals
4) How often the leader demands a high performance of the employees

Each attribute could take the following three levels:

1) Always
2) Sometimes
3) Never

It should be mentioned that we have tested preferences for leader styles with more attribute and more nuanced levels of intervention (most of the time and rarely) however, based on the results and interview discussions with focus groups, it was decided to keep the number of attributes and attribute levels at a low level in order to reduce the cognitive effort needed to make choices between leaders. (Mazzota and J. 1995; DeShazo and Farmo 2002; Boxall, Adamowicz et al. 2009) Each respondent was presented to four choice sets, which each included to hypothetical leader styles and the leader style of the respondent's own leader (opt out alternative).

In order to estimate preferences for leader styles and leader styles attributes, the 48 hypothetical leader styles were designed/created using the stated preferences design program NGENE. To make a more efficient design prior leader style utility values of 0.3 and 0.2 for the attribute levels "Always" and "Sometimes" were assumed relative to the "Never" level. (Choice Metrics 2012). The 48 leader styles were combined in 24 choice sets. Below is an example of a choice set.

Text box 1: Example of a choice set

Which leader style do you prefer?

	Leader A	**Leader B**	**Own Leader**
Expresses a clear the vision of the organization *and* retains the employees' focus on joined goals	Never	Sometimes	
Rewards employees, who perform as required	Always	Sometimes	
Retains the employees' focus on joined goals	Never	Sometimes	
Demands a high performance of the employees	Never	Always	
I prefer the leader style of (mark only one leader)			

Before stating the preferences for leader styles attributes, the respondents were given an introduction to the stated preference experiment including a description of the attributes and the levels and example of the a choice set. This is presented in the text box below.

Text box 2: Preample

In the next questions you are going to choose if your own leader should have other leader styles with regard to the some of leader attributes that you just have answered questions about.
You will be introduced to three leader styles, which all represent your own leader, except that the leader styles will vary with regard to the four leader attributes. We call them Leader A, Leader B and Own Leader. The leader attributes can have the three levels “Always”, “Sometimes” and “Never”.

There are no “correct” or “wrong” answers. If you find that Leader A or Leader B have a better leader style, you shall choose which of Leader A or B you prefer. On the other hand, if Leader A or Leader B do not have a better leader style across the four leader attributes, you should choose your Own Leader. Please notice that your choice of leader style is not about replacing your leader with a new person, but about which leader style you prefer that your own leader should have in relation to the four leader attributes. You are going to choose your preferred leader style four times from a set of different leader styles

Below is an example of a leader style preference question. Take a good look on the question and the leader attributes for the for three leader styles. Consider which of the leader styles you would prefer your own leader to have. In the example, Leader B is marked as the most preferred. Just as in this example, in the following questions, you should only choose one leader style per question.

	Leader A	**Leader B**	**Own Leader**
Expresses a clear the vision of the organization and retains the employees’ focus on joined goals	Sometimes	Never	
Rewards employees, who perform as required	Always	Sometimes	
Retains the employees’ focus on joined goals	Always	Always	
Demands a high performance of the employees	Sometimes	Never	
I prefer the leader style of (mark only one leader)		***X***	

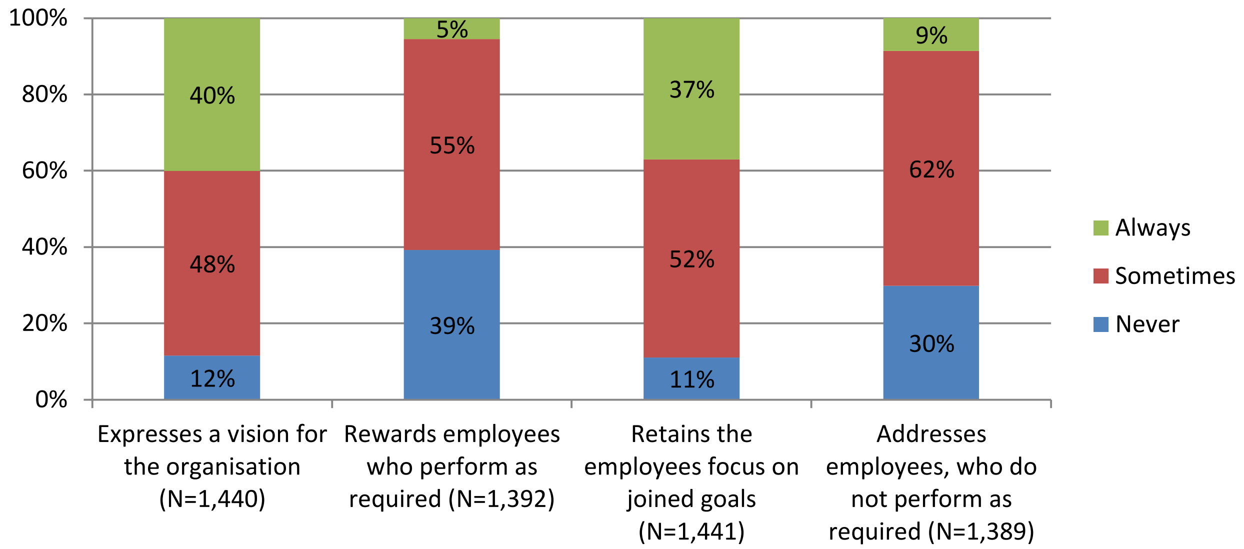
Now it is your turn to choose your preferred leader style

Current leader types

Prior to the leader styles preferences questions, the respondents were asked about their own leader's leadership styles. The distributions of the leader's styles are in

Figure 73 below. As the figure illustrate – not all respondents have answered the questions regarding the own leader's leader style

Figure 73. Distribution of leader styles among own leaders



Illustrated in the figure, nearly 50% or above of the employees state that their own leader "Sometimes" have one of the four leader styles. 37 % and 40 % of the leaders "Always" retain the employees focus on joined goals and express the vision of the organization, respectively. Only 5 % and 9 % of the leaders "Always" reward employees who performs as expected and addresses employees who do not perform as expected, respectively. 12 % and 11 % of the leaders "Never" retain the employees focus on joined goals and express the vision of the organization, respectively, whilst 39 % and 30 % of the leaders "Never" reward employees who perform as expected and addresses employees who do not perform as expected, respectively. Jointly, the distribution of leader styles point towards that the employees' leader have very different leader styles.

Preferences for leader styles

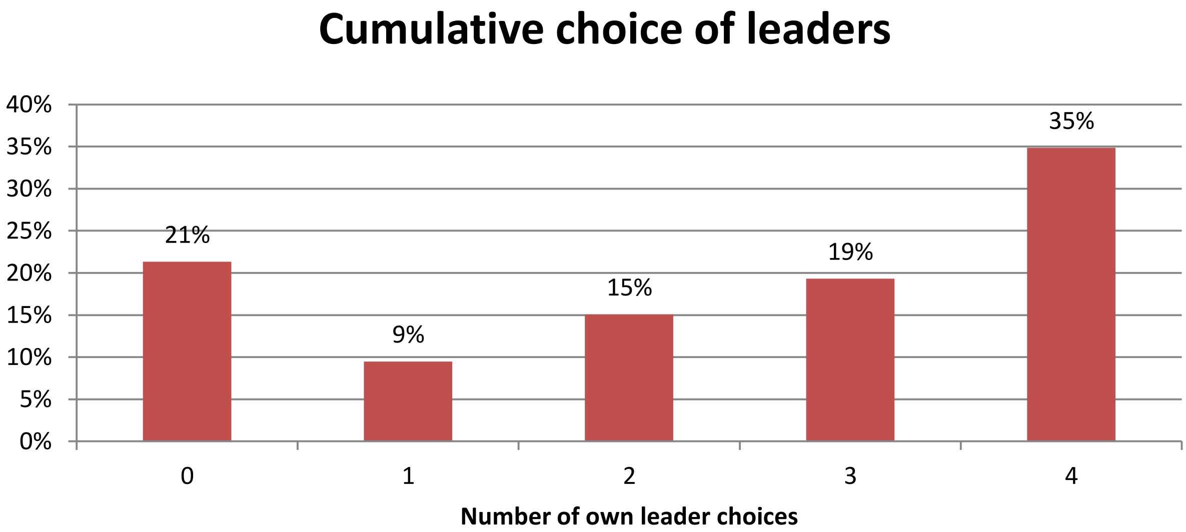
The distributions in figure 73 illustrate how the employees perceive the leader styles of their leader. However, the stated leader styles do not give information about, whether the leader styles are preferred and if not, what leader styles the employees would prefer instead.

In the following sections, we will take a closer look on the results related to the stated preferences for leader styles among the employees in the survey.

Number own leader choices

The first approach to get a better view of, whether or not the own leader have the preferred leader styles is to tabulate how many times the own leader's style or one of the two hypothetical leader styles are chosen. As mentioned each respondent choose between the leader styles four times. In the figure below the distribution of own leader's style and hypothetical leader style choices are shown.

Figure 74. Number of own leader's style choices, N=1487



As Figure 74 illustrates, approximately one third of the employees has always chosen their own leader in the four preferences questions. Accordingly, these employees seem to prefer their own leader's style relatively to the hypothetical leader styles. One fifth of the employees has never chosen their own leader and has thus expressed a strong preference for other leader styles compared to their own leader's style. Between these two groups of employees, 9%, 15% and 19% have chosen their own leader's style 1, 2 or three times, respectively.

In Figure 75 the number of own leader's style choices is illustrated as a function of the mean score of the employees' perceptions of their own leader's style. 127 respondents did not answer all for questions about the own leader's leader style. These respondents are not included in Figure 67

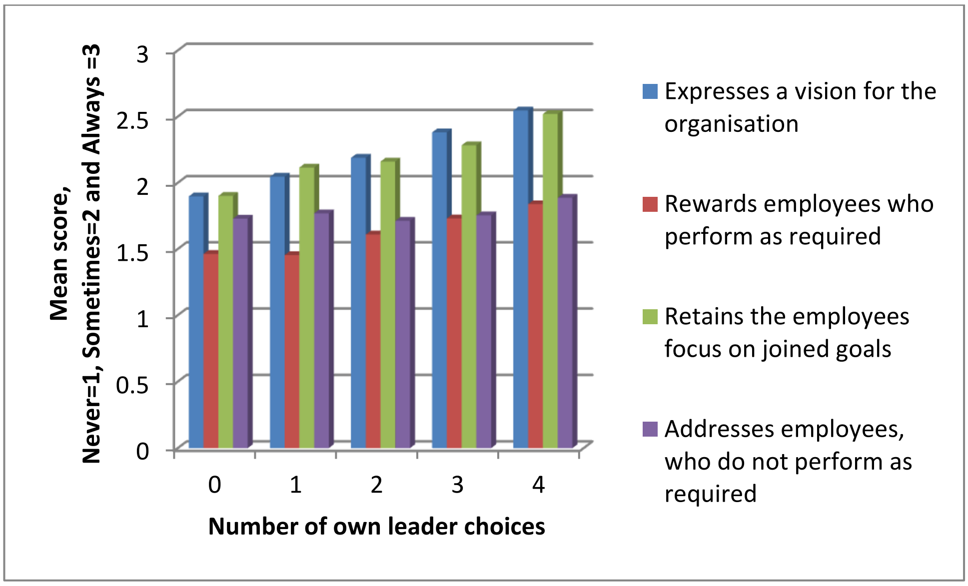


Figure 75: Number of own leader's style choices and average own leader's styles, N=1360.

The frequency, which the leader expresses the vision of the organization, retains the employees focus on joined goals and rewards employees who perform as required influence the choice of the own leader positively. On the other hand, the frequencies, which the leader addresses employees who do not perform as required seems to influence the choice of the own leader's style to a lesser degree.

New Employee Performance Review System (CBJ)

[TO BE ADDED]

New Test System (CBJ)

[TO BE ADDED]

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